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‘Business/IT Alignment during a Post Merger Integration’

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Abstract

Alignment between an Information Technology (IT) function and the organisation it serves is the process that drives successful investments in the effective and efficient use of IT to reduce internal and external business costs, and to create a competitive edge.

Mergers and Acquisitions (M&A) have a high impact on the organisations involved and the stressful post-merger integration process often includes anxiety, restructuring, and a new corporate identity, all of which create a high degree of uncertainty for those involved.

This research project considers the subject of Business/IT alignment within the time-frame of a post-merger IT integration. Within this period of great change the IT function needs to plan and execute a complex project that joins together the Information Systems (IS), IT infrastructure, and IT staff of two companies, while balancing the needs of the Business to take advantage of the positives, and avoid the negatives of its new position.

Specifically this study examines the key factors relating to Business/IT alignment at a tactical level that contribute to a successful IT integration, using a case study of a single manufacturing business unit, adding to the knowledge of the IT governance subject.

A key alignment criterion and two individual alignment factors were identified from the case study as supporting Business and IT strategies during a post-merger IT integration.

Key Words: Mergers and Acquisitions, IT Integration, IT Governance, Business Alignment

Declaration

The work is original and has not been submitted previously in support of any qualification or programme.

Word Count is 15, 979

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Chapter 1 Introduction

1.1 Scope of Research Project

1.1.1 Background on Business Unit Case Study

The business unit is a state-of-the-art manufacturing and distribution facility established 15 years ago and situated in the United Kingdom. The high-tech facility was designed to replicate the manufacturing processes of a sister site in the USA. The company was acquired two years ago, and commenced an extended integration process with two other larger acquired companies over a two-year period. The decision was made last year to consolidate the manufacturing infrastructure by transferring production from the sister site. To achieve this goal, a complex 18-month project was executed, creating a period of extensive change and challenges for the business and IT.

1.1.2 Management Aims and Objectives

The business unit management wanted to undertake an alignment maturity assessment to ascertain the current state of business/IT alignment, and to identify best practices that would improve the delivery of value to the business from IT.

1.1.3 Rationale for Research Project

The motivation for this research project was to identify the key factors relating to the alignment of the IT function to the strategic, tactical, and operational needs of a business unit during a period of post-merger acquisition, through the examination of a specific case study.

1.1.4 Why the subject is important

The financial significance of IT governance is persuasive; according to Weill and Ross (2004) companies with above average IT governance and following a specific strategy have more than 20% higher profits than firms with poor IT governance following the same strategy. Business/IT alignment can be considered as one of the foundations of IT governance.

1.1.5 Hypothesis

To identify which elements of the tactical business/IT alignment process have significance during a post-merger IT integration through a case study at a manufacturing business unit.

1.1.6 Scope of Research

This research project was undertaken with the agreement of the senior management at a single manufacturing business unit of approximately 500 staff. The strategic, tactical, and operational management of the site participated in the study through the means of two survey tools. The work was undertaken during a period of significant change following a post-merger IT integration.

1.2 Key Concepts and Issues

This research project considers the following three areas of IT:

- ✓ IT governance
- ✓ Alignment between the business and IT
- ✓ IS integration following a merger or acquisition (M&A)

To set the scene for this research study and to establish a baseline of understanding, the following section offers an introduction and personal interpretation of selected definitions within these subjects and related concepts.

1.2.1 Corporate Governance

The concept of governance defined by OECD (1999) is ‘corporate governance is the system by which business corporations are directed and controlled’. The corporate governance framework defines the structure for determining organisational objectives, accountabilities to various stakeholders, and monitoring performance. Traditionally, good corporate governance has been seen as the rights of the company’s shareholders, and the transparency and accountability of the board of directors.

1.2.2 IT Governance Framework

IT governance should be considered as just another part of the corporate governance framework. Weill and Ross (2004) proposed an asset governance framework (figure

01), which identifies key classes of assets belonging to a business. These include Informational and IT assets; e.g. Electronic Data, and Information Systems which are vital for a modern company to run its day-to-day operations. IT governance should be considered as the mechanism or process for looking after these special types of electronic assets.

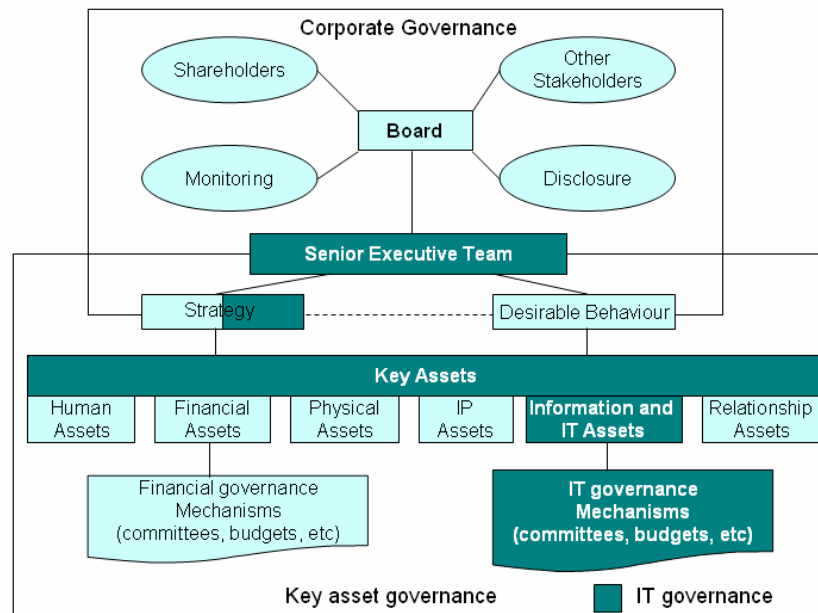


Figure 01, Weil & Ross (2004)

1.2.3 IT Governance

There are many definitions of IT governance, and Gerrard (2006) provides an unpretentious view: ‘the processes that ensure the effective and efficient use of IT in enabling an organisation to achieve its goals’. Van Grembergen (2004) increases the scope: ‘the need to ensure that the investments in IT will generate the required business value and that the risks associated with IT are mitigated’.

These views highlight the dual aspects of IT governance: -

- 1). *Delivery of business value through IT*, primarily achieved by aligning the IT investments directly to the strategic, tactical and operational needs of the business.
- 2). *Risk mitigation*, primarily achieved by performance management, or the demonstration of the achievements of IT in meeting the needs of the business.

Within the scope of *risk mitigation* there is a requirement for the accountability and control of the IS systems and IT organisation. An example would be the maintenance

of adequate IT security (ensuring the confidentiality, integrity, and access to business data, information, and knowledge) of corporate financial systems.

IT governance also has a longer-term view, defined by Peterson (2004) as ‘performing and transforming IT to meet the present and future demands of the business and its customers’. This view co-exists with that of IT management, which can be considered as the effective and efficient internal supply of IT services and products.

1.2.4 Business/IT Alignment

An important element of IT governance is the need to ensure that IT is in step with the business; there is little point in wasting money in delivering IT solutions that either don’t solve a company’s problems, or create an economic advantage. This balancing or alignment process is defined by Luftman & Brier (1999) as ‘applying IT in an appropriate and timely way, in harmony with business strategies, goals, and needs.’ The scope of the opportunity was identified by Duffey (2002) as ‘the process and goal of achieving competitive advantage through developing and sustaining a symbiotic relationship between business and IT’.

1.2.5 Strategic, Tactical, and Operational Alignment

The partnership between IT and the business often evolves during their joint participation in the implementation of a new Information System or in enhancing IT operational support that delivers results, cost savings or solves business problems. There are three levels of relationship between IT management and an organisation.

1. **Strategic:** Executive/senior management meet with IT management to define and prioritise IT programmes, projects and resources to meet business needs within the scope of IT governance.

2. **Tactical:** Senior/middle management meet with IT management to collaborate in the delivery of IT projects and to review IT services, ensuring the correct balance and focus of IT activities from the driving seat of the business.

3. **Operational:** Middle management and team-leaders meet with IT management/supervision to define and monitor fit-for-purpose delivery and support of IT applications and services to empower the business at the 'coal face'.

1.2.6 Mergers and Acquisitions

M&As are a strategic method for businesses to expand and attain economies of scale. This is achieved through diversification, access to new customers and markets, or the acquisition of new knowledge and technology. The primary purpose of acquiring businesses is to improve overall performance by achieving cost saving synergies, or increasing competitive advantage.

1.2.7 Post-Merger IT Integration

A complex post-merger business integration project usually follows a corporate M&A. It is often challenging and the acquiring organisation frequently fails to realise its acquisition objectives, due to a variety of problems linked to the stressful integration process; including job losses, restructuring, anxiety, and resentment among employees.

According to Vielba and Vielba (2006), IT integration is often an important factor in realising the business related synergies identified as part of the rationale for the M&A, and the complex post-merger business integration process is usually accompanied by a parallel and equally complex post-merger IT integration project.

According to Accenture (2004) the role of IT during the post-merger integration processes is:-

- 1). Continue to deliver operational services and capabilities
- 2). Enable the integration of the businesses
- 3). Provide a source of cost savings through realised synergies

1.3 Dissertation Structure

The structure of the dissertation is shown in figure 02.

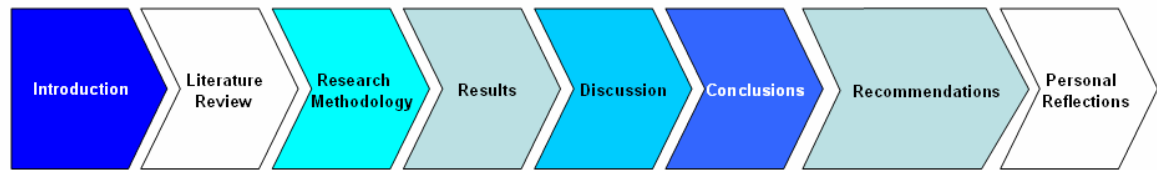


Figure 02

Chapter 1: Introduction

This gives the rationale and scope of the research project, including background on the case study. It also presents the key theoretical concepts around IT governance, Business/IT alignment and IT in a post-merger acquisition.

Chapter 2: Literature Review

This is an analysis of the current research and theory on the key concepts introduced in chapter 1, and their relevance and application to the research project. It presents and links prior research to progress this research study.

Chapter 3: Research Methodology

This explains how the study was conducted. It reviews the research methods described in chapter 2 and constructs a research framework to provide relevant data. It also reviews how the data was collected and analysed, considering validity and reliability.

Chapter 4: Results

The research findings are collated and reviewed in the context of the theoretical frameworks that had been considered, and appropriate observations made.

Chapter 5: Discussion

The observations made in chapter 4 are revisited and possible explanations discussed and expanded within the context of appropriate theories.

Chapter 6: Conclusions

The research question from chapter 1 is revisited and evaluated against the results from chapter 4 and the explanations offered in chapter 5.

Chapter 7: Recommendations

Lessons learnt from the research study are considered, and recommendations made on potential changes in the IT governance practices at the business unit and future research.

Chapter 8: Personal Reflection

The dissertation is considered as a learning experience and the various achievements considered.

Chapter 2 Literature Review

Introduction

There are two IT subjects included in this research project:-

- 1). IT Governance and the alignment between the Business and the IT function.
- 2). How IT adds value during a post-merger acquisition

This chapter considers previous research in these two fields and endeavours to construct a theoretical basis and a logical progression of linked material to support the hypothesis of identifying Business/IT alignment factors at a tactical level that impact a post-merger IT integration.

2.1 IT Governance and the alignment between the Business and IT

2.1.1 Business and IT Strategies

Successful companies have an overriding business strategy that drives both organisational strategy and information strategy. The decisions made regarding the structure, hiring practices, and other elements of the organisational strategy, as well as decisions regarding IS applications, IT infrastructure and hardware should all be driven by the company's business objectives, strategies and tactics. Successful companies strive to continuously balance these three strategies to achieve successful operation; this is the Information Systems Strategy Triangle proposed by Pearlson and Saunders (2006) and shown in figure 03.

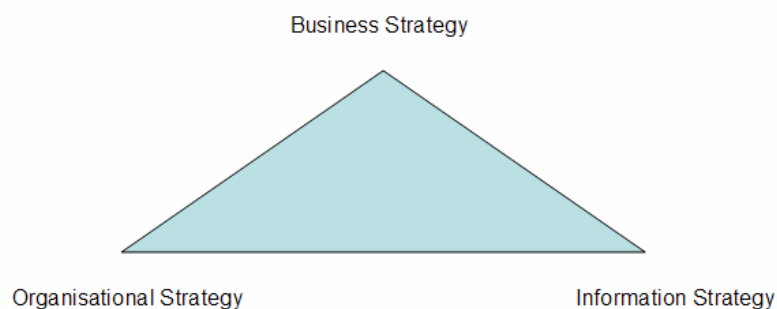


Figure 03, Pearlson & Saunders (2006)

Within the manufacturing sector there has been a traditional reluctance to invest in information systems; often they do not have the appeal of new production equipment, with demonstrable return on investments of labour saving efficiencies and quality

yield improvements. The enigma has been how to engage the senior management within a business and create interest and belief in the capability of IS applications, IT technology and services to support business strategies. If such a goal is to be achieved, then there is a need to link or *align* these IT capabilities to business strategies, and underpin an organisations approach to creating a differentiator in their market sector and achieve a competitive edge.

2.1.2 IT Governance

In their study of IT governance definitions, Webb et al. (2006) proposed five constituent parts:

- 1) Strategic Alignment
- 2) Delivery of Business value through IT
- 3) Performance Management
- 4) Risk Management
- 5) Control and Accountability

Their definition stated ‘IT governance is the strategic alignment of IT with the business such that the maximum business value is achieved through the development and maintenance of effective IT control and accountability, performance management and risk management.

De Haes and Van Grembergen (2008a) state that ‘IT has become critical in the support, sustainability and growth of the business. This pervasive use of technology has created a critical dependency on IT’. This reliance obliges an organisational focus on IT governance to ensure that the investments in IT generate the required business value and that the risks associated with potential IT failures are mitigated. Through an enhanced IT governance process, IT is not only an essential operational success factor for survival and prosperity, but also has the capability to contribute in achieving competitive advantage. This role offers greater leverage within a business, and a viewpoint that progresses IT from a commodity provider to a strategic partner.

2.1.3 Strategic Alignment between the Business and IT

Henderson and Venkatraman (1993) proposed a Strategic Alignment Model (SAM), and were the first to describe the interrelationship between a business and IT at

strategic and functional levels, as shown by four different domains; business strategy, IT strategy, organisational infrastructure and processes, and IT infrastructure, as shown in figure 04.

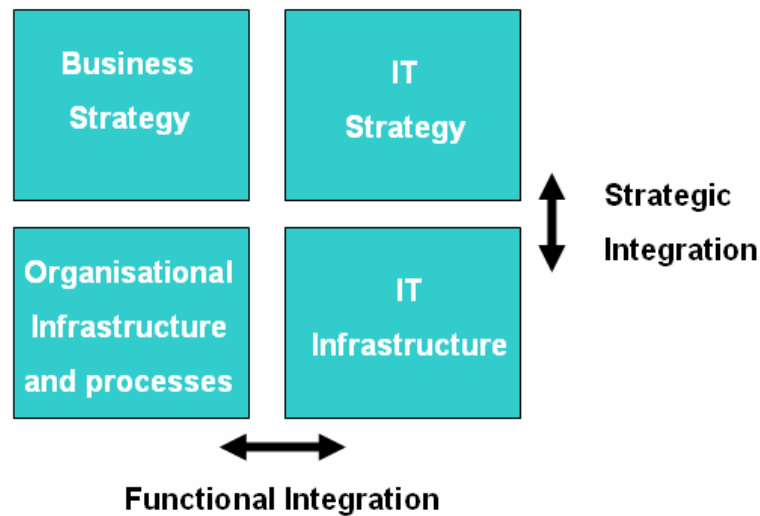


Figure 04, Henderson and Venkatraman (1993)

Their model describes two types of interrelationship or integration:

- 1) Strategic integration (which includes the external domain or environment in which the organisation operates) and the link between the IT and business strategic domains.
- 2) Functional integration (which covers the internal domain) and the link between the IT infrastructure and the internal organisational infrastructure and processes domains.

The model emphasises the importance of effective IT governance, and the need to balance choices made in all four domains.

Luftman (1996) considered this model and constructed the 12 components of alignment shown in table 01, proposing that the relationships existing amongst the twelve components define business/IT alignment.

i) Business Strategy
Business Scope - Includes the markets, products, services, groups of customers/clients, and locations where an enterprise competes as well as the competitors and potential competitors that affect the business environment.
Distinctive Competencies - The critical success factors and core competencies that provide a firm with a potential competitive edge. This includes brand, research, manufacturing and product development, cost and pricing structure, and sales and distribution channels.
Business Governance - How companies set the relationship between management, stockholders and the

board of directors. Also included are how the company is affected by government regulations, and how the firm manages its relationships and alliances with strategic partners.
ii) Organisational Infrastructure and Processes
Administrative Structure - The way the firm organizes its businesses. Examples include central, decentralized, matrix, horizontal, vertical, geographic, federal, and functional.
Processes - How the firm's business activities (the work performed by employees) operate or flow. Major issues include value-added activities and process improvement
Skills - H/R considerations such as how to hire/fire, motivate, train/educate, and culture.
iii) IT Strategy
Technology Scope - The important information applications and technologies.
Systemic Competencies - Those capabilities (e.g., access to information that is important to the creation/achievement of a company's strategies) that distinguishes the IT services.
IT Governance - How the authority for resources, risk, and responsibility for IT is shared among business partners, IT management, and service providers. Project selection and prioritisation issues are included here.
iv) Infrastructure and Processes
Architecture - The technology priorities, policies, and choices that allow applications, software, networks, hardware, and data management to be integrated into a cohesive platform.
Processes - Those practices and activities carried out to develop and maintain applications and manage IT infrastructure.
Skills - IT human resource considerations, such as how to hire/fire, motivate, train/educate, and culture.

Table 01, Luftman (1996)

In (2003) Luftman observed that ‘the key to business/IT alignment is building a consensus around the right relationships and processes that focus on six maturity components’. The degree of partnership between the business and IT can be measured through the performance of these six key alignment components or criteria: communications, value measurement, governance, partnership, technology (scope and architecture) and HR skills, as shown in figure 05.

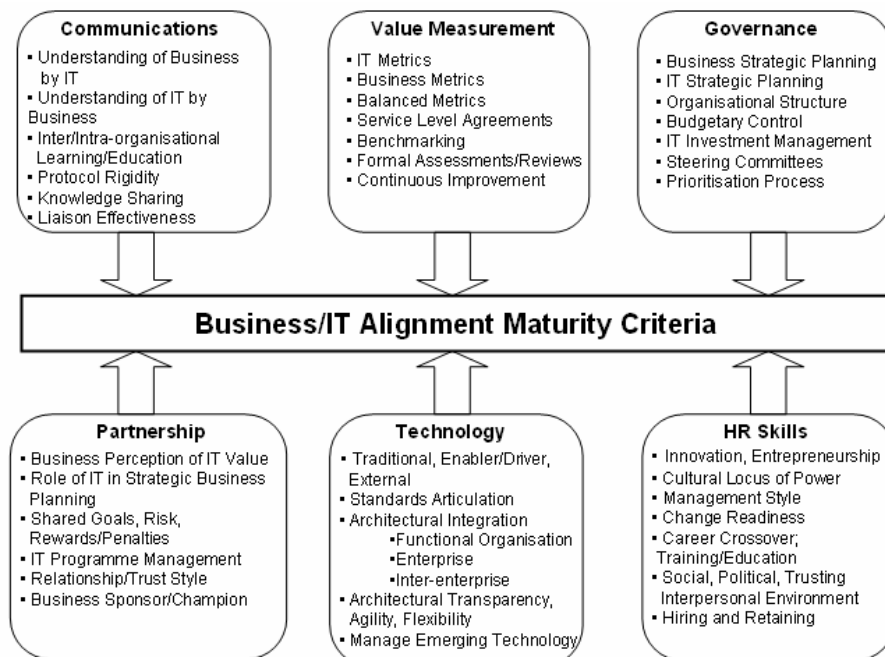


Figure 05, Adapted from Luftman (2003)

These criteria can be described as:-

1. Communications = Effective exchange of ideas and mutual understanding
2. Value Measurement = IT value demonstrated in business terms
3. Governance = Discussion, review, prioritisation and allocation of IT resources
4. Partnership = Relationship, participation in strategies, sharing risks and rewards
5. Technology = Evaluate and apply technologies, supporting business processes
6. HR Skills = Supportive of change, innovative and entrepreneurial ideas

Luftman (2003) also proposed a five level business/IT alignment maturity model, from level 1 – Initial or ad-hoc processes to level 5 – Optimised processes, where the scores an organisation achieves for each of the six components of maturity denotes the overall organisations alignment maturity, as shown in figure 06. These criteria form the basis of the business/IT strategic alignment maturity (SAM) model, which enable executive management to benchmark their organisations alignment maturity level.

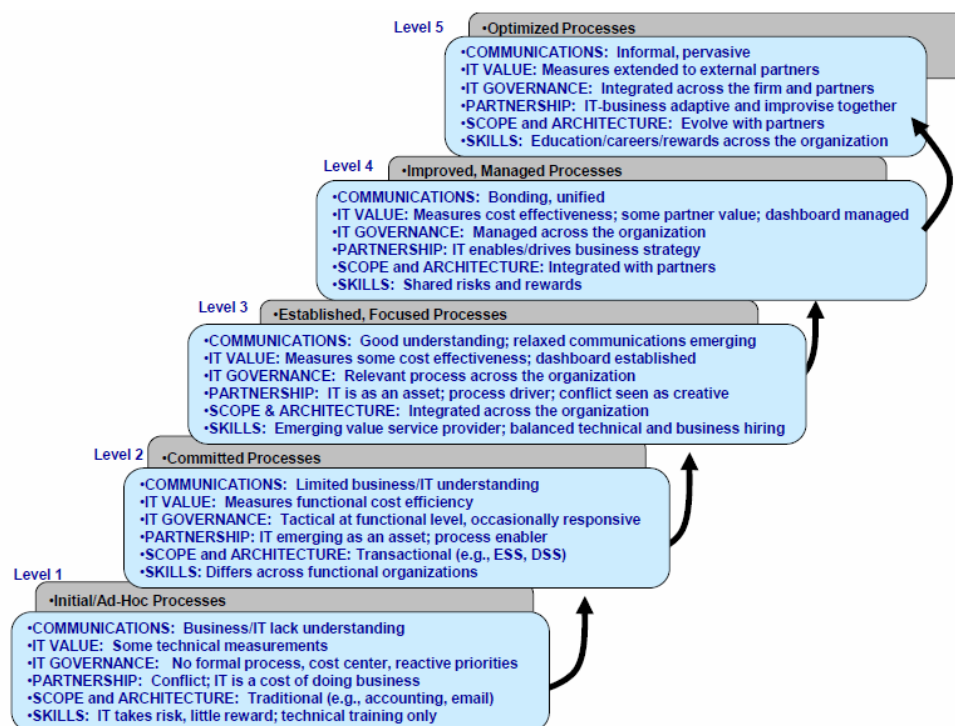


Figure 06, Luftman (2003)

2.1.4 Strategic, Tactical and Operational Alignment

According to Van Grembergen (2004) the alignment of the business and IT is a key element in IT governance. The strategic alignment maturity (SAM) model measures the strengths and weaknesses of business/IT alignment by business and IT executives.

Within Van Grembergen's book (2004) Luftman defines this as 'assessing the organisation at a higher stratum'.

In a modern business there are a range of stakeholders who need ownership over effective and efficient IS systems, and it is critical to receive feedback from all levels of an organisation on the alignment of all key business stakeholders and IT. As stated by De Haes and Van Grembergen (2008) IT governance is situated at multiple layers in the organisation, including operational level within IT and business management.

Gutierrez et al (2006) identified the limitations of the instruments available to measure alignment, which are generally designed for a strategic level audience in larger organisations. There is a need for a deeper understanding of alignment within the lower tactical and operational levels within an organisation to promote continuous improvement. Their work considered Luftman's (SAM) model and designed a questionnaire appropriate to these lower levels within an SME (Small to Medium Enterprise), assessing alignment in order to gain an in-depth understanding within one organisation, as shown in figure 07.

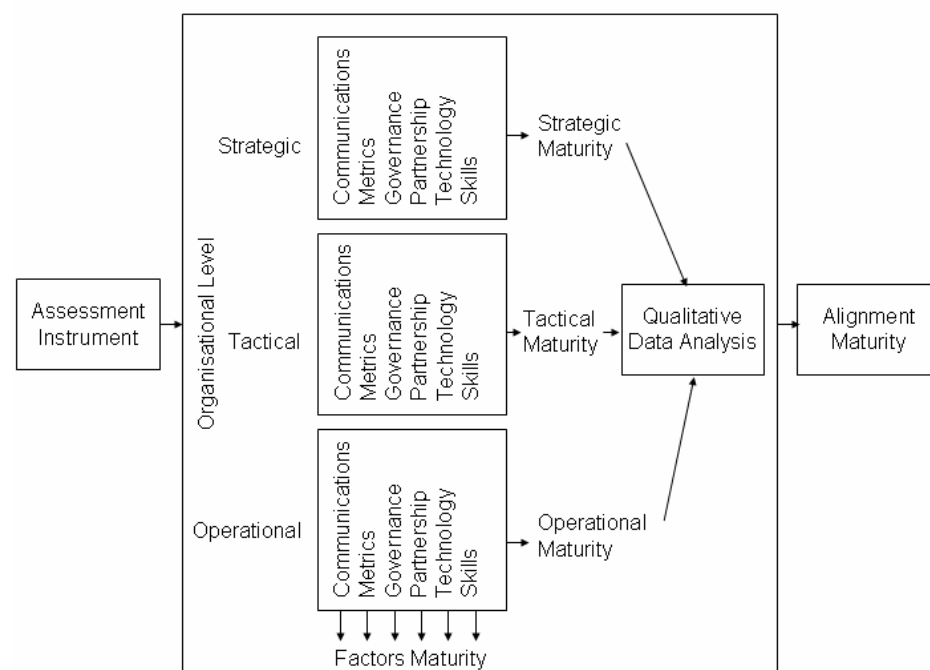


Figure 07, Gutierrez et al (2006)

Their study indicated that in this format Luftman's (SAM) model provides an adequate means of measuring alignment in such an organisation, and that the

development of the questionnaire contributes to an instrument capable of measuring business/IT alignment maturity at different organisational levels.

Qrunfleh and Tarafdar (2008) considered alignment between IT and other business functions at the operational and tactical levels. They observed that in spite of good relations between Chief Information Officers (CIO) and their C-level counterparts, the interface between middle and junior level IT and functional managers is often strained and hostile. Tactical business/IT alignment is necessary for making sure that IT projects are implemented on time and that the applications deliver the planned and desired business benefits. A lack of tactical Business/IT alignment happens because there are disconnects between corporate IT strategies and plant or divisional level IT strategies. They identified five important aspects or contributing factors and three outcomes of tactical Business/IT alignment

Five Aspects

- 1) Communication of corporate level IT strategy down to management levels
- 2) Balance between corporate standardisation and specific customisation
- 3) Interaction between management of IT and other functions
- 4) Governance structures and positions
- 5) Project Management

Outcomes

- 1) Enable execution of business strategy
- 2) Enable better relationships between IT and business managers at operational level
- 3) Enable execution of IT strategy

Table 02 compares Luftman's (2003) six alignment criteria to Qrunfleh and Tarafdar's (2008) tactical business/IT alignment aspects.

Alignment Aspect (Qrunfleh & Tarafdar)	Alignment Criteria (Luftman)
Communication of corporate level IT strategy down to management levels	Communications
Balance between corporate standardisation and specific customisation	Technology
Interaction between management of IT and other functions	Partnership
Governance structures and positions	Governance
Project Management	Governance

Table 02

The alignment aspects appear to have a high level of similarity to four of the alignment criteria. If it is considered that the tactical business/IT research of Qrunfleh and Tarafdar (2008) is within the same operational domain as Gutierrez et al (2006), then there is the opportunity to propose a ‘bridge’ between the following items of literary research in business/IT alignment, as shown in figure 08.

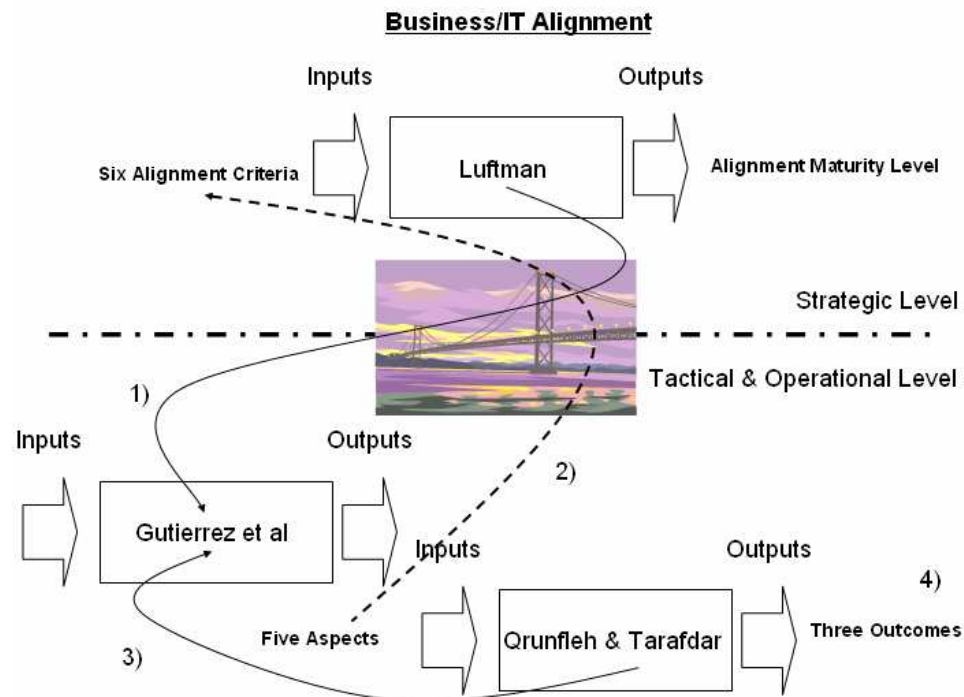


Figure 08

- 1) Gutierrez et al (2006) demonstrated valid use of the Luftman (SAM) model at tactical and operational level, associating this model with strategic and tactical levels of a business.
- 2) The five alignment aspects of Qrunfleh and Tarafdar (2008) are a sub-set of the six alignment criteria of Luftman (2003), linking the inputs of these alignment models
- 3) In consideration of measuring the inputs of tactical alignment, the Gutierrez et al (2006) model could replace the Qrunfleh and Tarafdar (2008) model, as their five aspects are encompassed within the Luftman's (2003) six criteria.
- 4) If it can be considered that Luftman's (2003) research on business/IT alignment can be linked via Gutierrez et al's (2006) work to Qrunfleh and Tarafdar

(2008), then there are quantifiable and potentially measurable inputs and outputs of alignment.

This raises the opportunity to measure the state of business/IT alignment through the three Qrunfleh and Tarafdar (2008) outcomes. It should be possible to conduct a Luftman (SAM) assessment at tactical level and correlate the scores of the respective alignment criteria; which represent the alignment process, with the three outcomes; which represent the outputs of alignment.

2.1.5 Strategic Alignment and IT Governance

De Haes and Van Grembergen (2008) considered ‘How are organisations implementing IT governance to achieve a better alignment between the business and IT?’ In their research framework, the deployment of IT governance processes, structures, and relationship mechanisms are present to achieve a better business/IT alignment. Their research identified ten base-line IT governance practices clearly present and mature (above level 2; on a scale from 0 - non-existent to 5 - optimised) in high performing organisations. Their study identified 33 IT governance practices at the level of executive/senior business and IT management.

They tabulated the 33 practices, and provided scores on their effectiveness and ease of deployment. Table 03 lists these practices, assessing the relevance of each to the case study, and an interpretation of their position within each of the Luftman alignment criteria.

No #	Description	Relevance to site	Luftman Criteria
S1	IT strategy committee at level of board of directors	N	Governance
S2	IT expertise at level of board of directors	N	Governance
S3	IT audit committee at level of board of directors	N	Governance
S4	CIO on executive committee	N	Governance
S5	CIO reporting to CEO	N	Governance
S6	IT steering committee (IT investment evaluation/prioritisation at exec/senior management level)	Y	Governance
S7	IT governance officer	N	Governance
S8	Security/compliance officer	N	
S9	IT project steering committee	Y	Governance
S10	IT security steering committee	N	
S11	Architecture steering committee	N	Governance
S12	Integration of governance/alignment tasks in roles and responsibilities	N	
P1	Strategic Information systems planning	Y	Partnership

P2	IT performance measurement (IT balanced scorecard)	Y	Value Measurement
P3	Portfolio management	Y	Governance
P4	Charge back arrangements	Y	Value Measurement
P5	Service level agreements	Y	Value Measurement
P6	IT governance framework COBIT	Y	Value Measurement
P7	IT governance self assessment	Y	Value Measurement
P8	Project management methodologies	Y	Value Measurement
P9	IT budget control and reporting	Y	Value Measurement
P10	Benefits management and reporting (decision grid)	Y	Value Measurement
P11	COSO	N	
R1	Job Rotation	Y	HR Skills
R2	Co-location	N	
R3	Cross-training	Y	Communications
R4	Knowledge management	Y	Communications
R5	Business/IT account management	Y	Communications
R6	Exec/senior manager giving good example	Y	Communications
R7	Informal meetings between business and IT management	Y	Communications
R8	IT leadership	Y	Communications
R9	Corporate internal communications addressing IT on a regular basis	Y	Communications
R10	IT governance awareness campaigns	Y	Communications

Table 03

2.1.6 Which is First IT Governance or Business/IT Alignment?

De Haes and Van Grembergen's (2008) work appears to present an interesting paradox. If it has been established, that IT governance has the primary function of managing investments in the asset class of Information Systems. Then IT governance can be defined as the *delivery of business value through IT*, achieved through strategic alignment, i.e. ensuring investment in technology serves the needs of an organisation. In other words IT governance is the goal and strategic alignment is a contributing factor.

Alternatively, an interpretation of De Haes and Van Grembergen (2008) and Luftman (2003) is that business/IT alignment is the goal and IT governance is a contributing factor. This does not seem logical, as business/IT alignment for its own sake should not directly drive the financial performance of a business, whereas business/IT alignment delivering IS that the business needs to achieve competitive advantage would appear a more balanced perspective.

2.1.7 Section Summary

- 1) There is a credible and established method to measure the effectiveness of the business/IT alignment process, using the Luftman (SAM) model to assess the alignment maturity level.
- 2) The Luftman (SAM) model can be used at strategic, tactical and operational level, and its use has been successfully applied to a single site at tactical and operational level, by appropriate enhancement/localisation.
- 3) Previous research (De Haes and Van Grembergen) has established a list of 33 IT governance practices, as structures, processes and relationship mechanisms at strategic level that can be deployed to improve the business/IT maturity alignment score. If we consider these practices as potential *inputs* to a business/IT alignment process or 'system', then their effectiveness can be measured using the Luftman (SAM) model to measure the *improvement or deterioration* of business/IT alignment maturity process through its maturity score.
- 4) In terms of tactical business/IT alignment process, according to Qrunfleh & Tarafdar (2008) the *outputs* are; enable execution of business strategy, enable better relationships between IT and business managers at operational level, and enable execution of IT strategy.

If tactical business/IT alignment can be considered as a 'closed system' as shown in figure 09, then a method exists to measure the state of the process, by executing Luftman's (SAM) model assessment in response to changes in the *inputs* (IT governance practices). If a method to measure the *outputs* defined by Qrunfleh and Tarafdar (2008) can be constructed, then in principle progress can be made on tactical business/IT alignment at a business unit, by altering the IT governance inputs, and monitoring the change in process conditions, and the change in outputs.

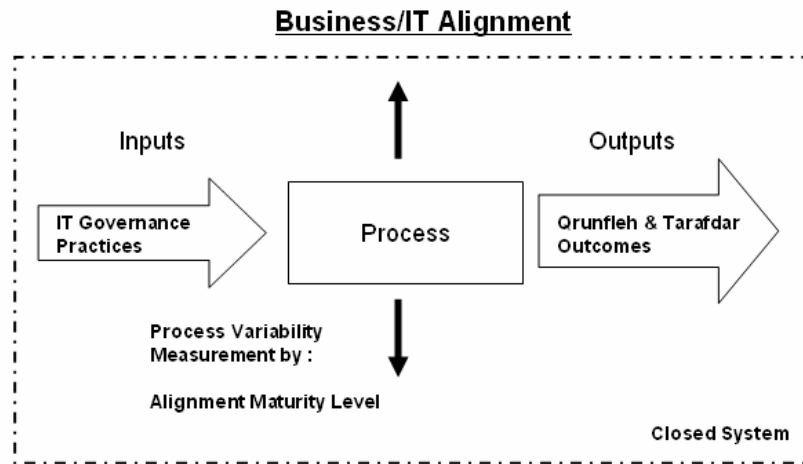


Figure 09

2.2 How IT adds value during a post merger acquisition

2.2.1 IT in a Post-Merger Integration

Following a merger or acquisition and during the complex post-merger integration process between two companies, the IT function needs to plan and execute a complex project that reconciles and combines the various IS applications, IT infrastructure and IT staff of the two companies. During this period of great change, IT needs to ensure that the business is able to take advantage of the positives and avoid the negatives of the new position. Once the IT integration has been executed, a method is required to determine the success of the post-merger integration process.

In (2005) Alaranta explored the various aspects of post-merger IS integration success. She established key post-merger IS success criteria, by combining two pieces of previous research. First by considering the well known Delone and McLean success model (revised 2002) and shown in figure 10, within the domain of post-merger integration. Second by incorporating the research of Robbins and Stylianou (1999) which examined IS professionals' ability to generate positive outcomes as a result of the integration of acquirer and target information systems.

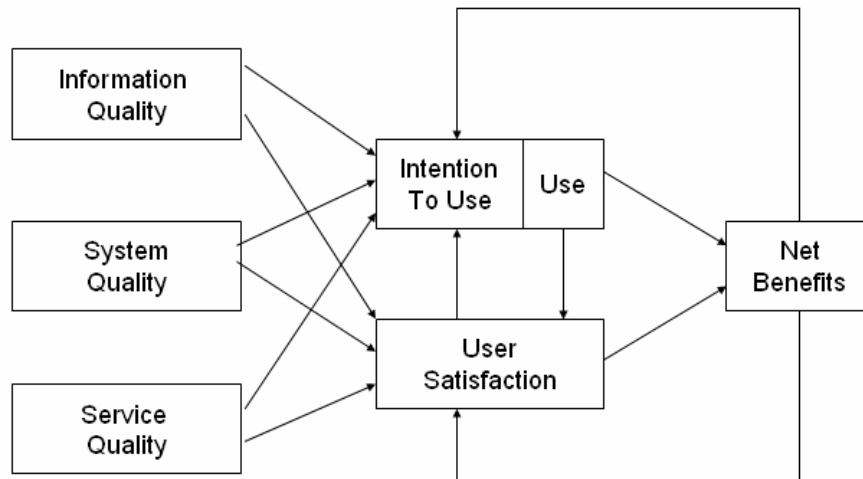


Figure 10, DeLone and McLean (2002)

Alaranta (2005) proposed the following components of post-merger IS integration success.

- 1) User satisfaction with integrated software system and information quality as well as its use
- 2) Efficient and effective IS integration management
- 3) Efficient IS staff integration
- 4) IS ability to support the underlying motives of the merger

The Robbins and Stylianou (1999) research built on earlier work of Stylianou, Jefferies, and Robbins (1996) in which they developed a conceptual research model that examined the relationships between the measures of IS integration successes and components that affect it. Their research measured successful integration using the following variables:

- 1) IS assessment of the success of the integration process
- 2) IS assessment of the success of the integrated systems
- 3) Performance of the IS function with regards to exploiting merger opportunities
- 4) Performance of the IS function with regards to avoiding merger problems
- 5) IS assessment of user satisfaction with integration process
- 6) IS assessment of user satisfaction with the integrated systems

Returning to section 2.1.7, a method was needed to measure the *outputs* of the tactical business/IT alignment process defined by Qrunfleh and Tarafdar (2008). If the outputs from Qrunfleh and Tarafdar (2008) and Stylianou, Jefferies, and Robbins (1996) are compared, as shown in table 04, there is a good match between both sets of criteria.

Stylianou, Jefferies, and Robbins (1996)	Qrunfleh & Tarafdar (2008)
User Satisfaction	
Ability to exploit merger opportunities	Enable execution of business strategy
Improved IS capability	Enable execution of IT strategy
Ability to avoid merger problems	Enable execution of business strategy
Effective IS resource utilisation during the integration process	Enable execution of IT strategy
	Enable better relationships between IT and business managers at operational level

Table 04

Hence the Stylianou, Jefferies, and Robbins (1996) method could be used to measure the outcomes of tactical business/IT alignment in a post-merger IS integration situation.

2.3 Chapter Conclusion

Consider business/IT alignment as a ‘closed system’, as shown in figure 11. By executing Luftman’s (SAM) model assessment, the state of the alignment process can be determined by scoring each of the six key alignment criteria and the overall maturity index. This should be true for tactical business/IT alignment for a single business unit by localisation of the (SAM) assessment instrument.

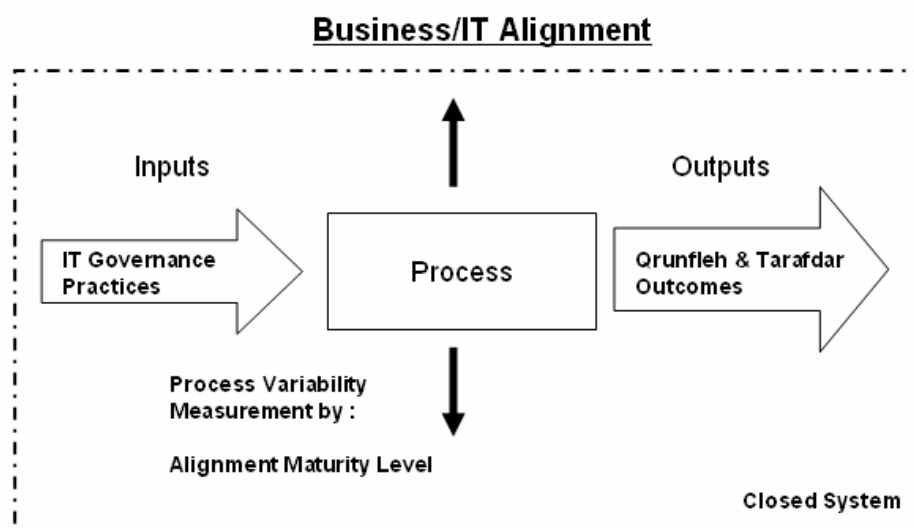


Figure 11

Additionally changes in the alignment process can be measured in response to modifications in the *inputs* (operational and tactical IT governance practices), which

would enable the best match of IT governance practices to be introduced and maintained.

If this single business unit is in a post-merger IT integration state, then by executing the Stylianou, Jefferies, and Robbins (1996) method for measuring successful post-merger IS integration *outputs*, in theory there should be a correlation between the strengths and weaknesses of each of the tactical business/IT alignment criteria and quantifiable measures of the successes of achieved business and IT strategies.

Chapter 3 Research Methodology

3.1 Research Strategy

The objective of this research project is ‘to identify which elements of the tactical business/IT alignment process have significance during a post merger IT integration through a case study at a manufacturing business unit’.

The research strategy considered the logical progress of theories and ideas constructed in chapter 2. The goal was to adapt and extend experiments from this previous research, building on these established scientific foundations to support the extension of ideas within the hypothesis.

The first objective was to review the experimental and data collection methods used in the following research studies and select the most relevant and practical way to repeat, link and extend the research where necessary. Considerations were made with respect to the practicality and extent of this research study in comparison to the scale, academic level and resources of the previous studies, to ensure the various aspects identified would fit within the context of the single manufacturing site and participant population, and the resources of this study.

Previous studies considered within the literature review:

- 1) Gutierrez et al. (2006) business/IT alignment study
- 2) De Haes and Van Grembergen (2008a) study on IT governance practices
- 3) Stylianou, Jeffries, and Robbins (1996) study on IS integration

The rationale for undertaking three studies was that item 1 would provide data on the overall state of the business/IT alignment process and the strengths and weaknesses of specific alignment criteria. Item 2 would provide data on appropriate and significant IT governance inputs to the business/IT alignment process. Item 3 would provide data on the state of the outputs from business/IT alignment, and would be used as the method to correlate the strengths and weaknesses of the business/IT alignment process, and identify which alignment criteria have significance.

This research project had the dual goal of studying the subject of business/IT alignment and to provide a report to the business unit identifying potential improvements in current IT governance practices. Hence although item 2 was not considered as strictly necessary for the purpose of the research project, it was included to identify best practice IT governance structures, processes, or relationship mechanisms that would improve the existing Business/IT alignment situation.

The methods used by the three studies were compared, as shown in table 05.

Study	Data Collection	Type	Instrument	Population	Analysis	Observations
1	Survey	Quantitative	Amended Luftman (SAM) Questionnaire	Small SME	Statistical	Consider Interviews
2	2 step Survey, 2 populations	Quantitative	3 rounds of various questionnaires. Another survey and workshop	Expert Panel/ Extended	Statistical	
3	Survey	Quantitative	Designed questionnaire	44 CIOs	Statistical	

Table 05

All three had the following common elements; quantitative data collection through survey tools and statistical analysis. In review and comparison of their methods, the initial construct and method of the data collection was formulated.

3.1.1 Ethical Issues

Before detailed study design was undertaken, ethical principles were considered to make sure that no-one would be harmed psychologically as a consequence of taking part in this study, and to observe the need to protect the rights of the research participants.

Voluntary Participation and Informed Consent

The principle of voluntary participation requires that employees should not feel coerced into participating in this research project. To achieve this goal, a staged communication process was designed. The senior management team were informed of the research project, its goals, its design, the target audience and the proposed research process. Following acceptance of the research project, the participant group received an e-mail communication on the study, its voluntary nature, and its format and contact details for further information. Each individual participant then received a

personal e-mail invitation to participate with information on the study and reiterating its voluntary nature, again with contact information for assistance if required.

To confirm voluntary participation, following the instructions at the start of the survey each participant was required to respond to a mandatory question that requested their informed consent to continue. If an employee did not want to continue they had the choice to terminate and provide an optional reason for leaving the survey.

Confidentiality And Anonymity

One of the primary concerns was to protect the privacy of the research participants, and the issue of each participant's confidentiality and anonymity was considered.

Potential Issue - The need to preserve the anonymity of the participant, for fear of potential current or future career impact

Resolution 1 - Each participant was allocated a unique serial number and the survey results were stored by serial number rather than named individual. The link between each participant and this serial number will be kept confidential by the lead researcher.

Resolution 2 - Security permissions were enabled on the electronic survey tool to ensure participants could only 'see' their own survey.

Resolution 3 - Each participant received information reassuring them that their individual survey results would be kept confidential and how this would be achieved.

Risk of Harm

Another concern was to protect research participants and other employees of the risk of harm as a result of their participation. The following issue and resolutions were considered.

Potential Issue 1 – Deliberate skewing of survey responses for personal gain or detriment of other individuals or departments by participants.

Resolution 1 – Analysis of data to look out for abnormal results with high deviation, and to be prepared to seek further clarification from a participant, or to discard invalid data.

Resolution 2 – There are existing staff performance management processes in place to fairly assess staff competence against past achievements.

Resolution 3 - Clear communication on the purpose of the study, to ensure participants understand their obligation to answer truthfully.

The letter of ethics approval 293/09/AM/CSIS is included in appendix a.

3.2 Study Design

The questionnaire would contain the following four sections.

- 1) Luftman (2003) SAM model assessment
- 2) Unstructured collection of IT governance structures, processes, and relationship mechanisms for each of the six alignment criteria
- 3) Unstructured collection of improvement ideas on improvements to IT governance structures, processes, and relationship mechanisms for each of the six alignment criteria
- 4) Structured collection of responses to measure the success of an IS integration using the Stylianou, Jeffries, and Robbins (1996) method.

The steps followed during the design study are shown in figures 12 and 13.

3.2.1 Questionnaire Design

The goal of section 1 of the questionnaire was to follow the method used by Gutierrez et al. (2006) in their Business/IT alignment study of an SME. After review of their work, a suitable survey was designed using page 31-38 of Luftman (2003). A survey tool was created in Microsoft Word and a test participant was interviewed by the lead researcher, asking each question and recording each response. This method of interview was thought to be important to understand the issues and concerns of the participant around the subject of business/IT alignment while collecting data. The

pilot tested the feasibility of filling in the survey and asking questions without getting distracted and keeping the interview to a reasonable duration.

The method was found to be distracting for the interviewer and interviewee. The lead researcher found it difficult to leave problems alone without further discussion. Other issues included the use of a printed data collection document which allowed annotations and the selection of inappropriate multiple answers. The interview took longer than one hour and the interviewee became restless due to the duration of the meeting, the lack of clarity on some of the questions and interviewer's inability to describe some of the academically worded IT governance questions in a way that could be easily understood by the interviewee. In summary, this method was considered inappropriate to gather high quality quantitative data and the duration was unrealistic for the potential population of the study.

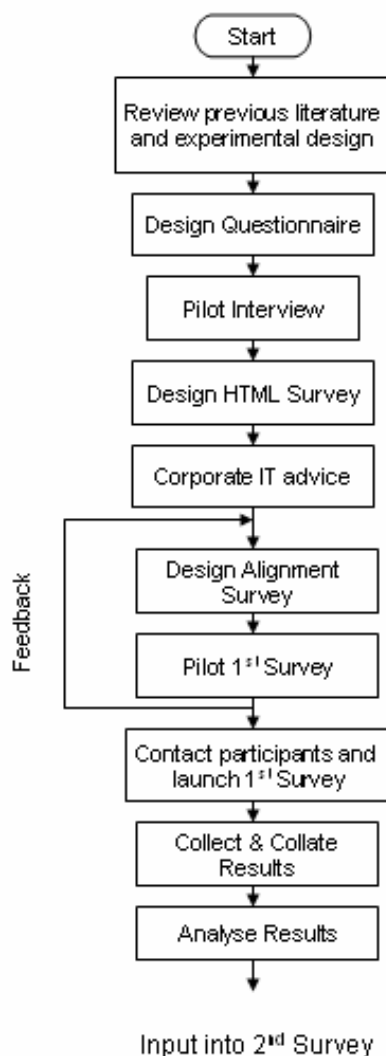


Figure 12

The data collection instrument was converted into an HTML web-based intranet survey, hosted on internal company IT infrastructure. This dealt with the issue of the selection of multiple options through appropriate programming logic within multi-choice data selection. It dealt with clarity and consistency of verbal questions with a single clear explanation of each question using non-academic wording which were reviewed and checked. It also gave the option to distribute the survey electronically which enabled a participant to start the survey prior to the scheduled data collection interview; reducing the duration of the survey. It was still considered necessary to have a personal interaction with each participant, to capture any relevant qualitative data.

Advice on the research strategy was sought from senior IT staff, and their recommendations were based on previous surveys executed within the business.

Specific recommendations were:-

- ✓ It should be a web-based electronic survey
- ✓ It should be simple to execute; any guidance must be on-line
- ✓ It should take no more than 20-30 minutes to complete
- ✓ It should be stand-alone without companion documentation
- ✓ No introduction or support phone calls should be needed
- ✓ No technical IT jargon
- ✓ The survey should arrive by e-mail as a hyperlink, with brief explanation
- ✓ No physical or telephone interview for qualitative data; focus on quantitative

Reviewing the timings achieved so far, it was unrealistic to design an electronic survey that would cover the material in 20-30 minutes. An alternative method was to design two surveys. The first would collect data on the six alignment criteria. Based on the low scoring results, the second survey would collect data of relevant IT governance practices. It would also collect data on the results of a post-merger IS integration, as shown in table 06.

Survey	Subject	Section
1	Business/IT Alignment SAM assessment of six alignment criteria	1
2	IT governance practices to improve alignment, and measure IS integration success	2 – 4

Table 06

This proposal had good buy-in from the business, as the inconvenience of a second survey would be balanced by focusing on alignment ‘problem areas’ for intense feedback, and should reduce the overall survey time for participants.

3.3 First Survey

3.3.1 Design of the First Survey

A pilot study of the new format of survey 1 was launched and hosted on an internal HTML server, with an audience of two IT staff. The feedback advised on the need for improved layout and more importantly on the difficulty in understanding the specific meaning and IT governance jargon of some of the questions.

A new 'less cluttered' survey template was chosen to improve the electronic questionnaire layout. The survey had six alignment sections, with clear division between them and non-technical description of the meaning of each of the six alignment criteria. In addition it was found that pages 41 – 45 of Luftman (2003) used a less academic style of questions which were easier to understand. These were incorporated (on some occasions re-worded where necessary) while retaining their meaning.

A more demanding business pilot study of survey 1 was launched with two senior staff. However the results were disappointing and issues were observed in the execution of the intranet survey. To resolve such potential technical issues with a larger rollout, the HTML survey was hosted by a web survey company www.surveymonkey.com. The survey text was again refined to ensure the questions were as simple to understand as practical without amending their context. The Luftman & Kempaiah (2007) update on Business/IT alignment proved valuable in enhancing the wording.

The final version of the first survey had a half page of introduction and instructions. There were a total of six sections; one for each alignment criteria. Each section had a simple initial explanation on the criterion and either six or seven questions on specific alignment factors, with the requirement to pick only one of five responses that was considered to be the most appropriate; there was no option for 'Not Applicable'. There were a total of 38 questions on all the alignment factors. The participant could move backwards and forwards in the HTML format questionnaire. However, the questions were mandatory and would not allow progression without completing all the questions in each of the six sections. The estimated time to complete the survey was 10 minutes. The participant could partially complete and save each section of the survey and return later to complete the survey within a two week timeframe. Once the survey was complete, the participant could not go back and edit their answers.

The design of survey 1 is shown in appendix e.

3.3.2 Execution of the First Survey

The directors and senior managers represented the strategic management and their direct reports; the middle managers represented the tactical management on-site. The managers or supervisors reporting to the middle managers with staff responsibilities represented operational management. The total roster of participants was 74. The survey duration was two weeks.

3.3.3 Return of the First Survey Sample

Of the 74 original invitations sent, 60 return surveys were received, which was a (81%) response rate. 7 started but did not complete the survey (9%) and 1 chose not to participate (1%), but gave no reason. 1 response was spoilt; no name was given. In total a successful completion rate of 51 (69%).

3.3.4 Analysis of the First Survey

The data from the survey was downloaded directly into Microsoft Excel. The analysis used statistical methods including mean, median, mode and standard deviation to ascertain which of the 38 individual factors scored highest and lowest, and their contribution to each of the six alignment criteria and the overall Business/IT maturity level. The results of the senior managers, middle managers and team leaders, and between IT and non IT staff were correlated for comparison. Rowntree (1981) was used to guide statistical analysis methods.

3.4 Second Survey

A draft second survey was constructed prior to launch of the first, to ensure a credible method existed to collect all the required data for the hypothesis. The design of the second survey reflected the lessons learnt in the design of the first survey

3.4.1 Design of Second Survey

Following the successful analysis of the first survey, the scores of the 38 Business/IT alignment factors were reviewed with the IT manager, and the five weakest and the three highest scoring alignment factors were selected for feedback in the second survey.

By using table 03 as a guide, and following discussions with the IT manager, appropriate operational and tactical IT governance practices were scripted as multi-choice answers for each of the five weakest scoring alignment factors.

It was also seen as valuable to ask for feedback on the three high scoring factors to understand what was currently working well and could be further developed, and free text responses were designed to collect comments.

Finally, a separate section utilised the IS success questions taken from the Stylianou, Jeffries, and Robbins (1996) study. The questions ascertained the success of the IT integration direct from the end-users, with the requirement to pick only one of four responses that was considered to be the most appropriate.

The final version of the second survey had a half page of introduction and instructions. It comprised seven sections, one for each of the six alignment criteria, all of which had a simple introductory explanation of each criterion. Each criteria section had one or two specific questions on low or high scoring factors, with the requirement to pick two of seven responses that were considered as the most appropriate; there was an option for 'Not Any'. There were a total of 8 questions on alignment factors in

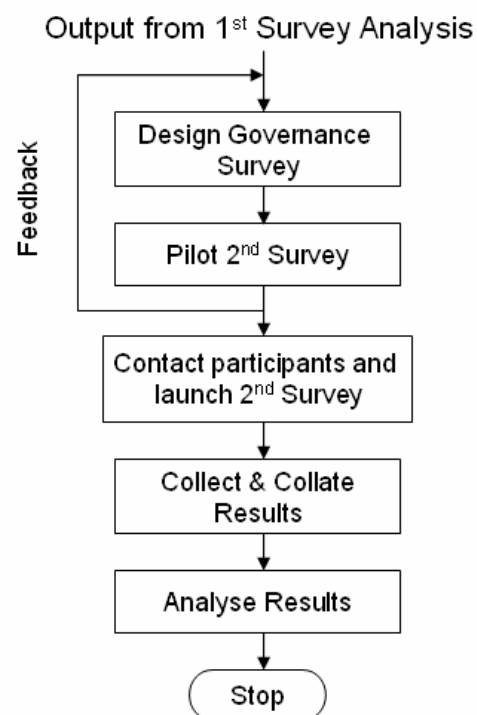


Figure 13

all. The seventh section had four IS success factor questions, with the requirement to pick only one of four responses that was considered as the most appropriate; there was no option for 'Not Applicable'. The participant could move backwards and forwards in the HTML format questionnaire. The estimated time to complete the survey was 10 minutes. The participant could partially complete and save each section of the survey and return later to complete the survey within a two week timeframe. Once the survey was complete, the participant could not go back and edit their answers.

The layout of survey 2 is shown in appendix f.

3.4.2 Execution of the second Survey

To correlate the results of the IT success factor section with the results from the 38 alignment factors in the first survey, it was necessary to only send the survey out to the 51 successful respondents of the first survey. The survey duration was two weeks.

3.4.3 Return of Second Survey Sample

Of the 51 invitations sent, 34 returns were received and completed, which was an overall successful completion rate of 67%.

3.4.4 Analysis of Second Survey

The data from the survey was downloaded directly into Microsoft Excel. The analysis used statistical methods including mean, median, mode, standard deviation, and statistical correlation to ascertain which of the 38 individual factors and their associated six alignment criteria correlated to a successful outcome of IS integration. Rowntree (1981) was used to guide statistical analysis methods.

3.5 Validity and Reliability

To ensure the research project performed well and produced relevant results, the key areas of research validity and reliability were reviewed to ensure potential errors and problems with how the data was collected were minimised.

3.5.1 Validity

Validity is an indication of the dependability of a research study and applies to the design and methods used in this research. Two significant types of validity were considered, internal and external validity.

Internal Validity

This research study has internal validity if a causal relationship can be established between one or more independent variables, and one or more dependent variables.

The following are known threats which reduce internal validity and were reviewed to understand if measures should be executed to control these individual threats.

Threat	Issue	Mitigation
History	Events that happen outside of this research project can alter or affect the participant's attitudes, opinions, performance during the survey.	The survey responses were collected quickly, and the data collection process for both surveys took two weeks. The time between the surveys was also kept short (two weeks).
Maturation	Natural psychological changes take during the course of the research project	A large survey group (74) was selected to randomise the impact of outside variables on individual's responses
Testing	A repeated test format can cause the participants to learn answers, and perform a survey better the second time.	The research project population included 74 busy key employees, and it was decided not to use a control group. The second survey retained the format of the first; however, the questions were entirely different. Practice from the first survey would not be relevant to the results of the second
Instrumentation	If the survey uses a variety of rating scales, and ambiguous questions, the survey instrument will 'decay' and the reliability of the results may deteriorate	Care and attention was taken with the design of both surveys to minimise the variety of scales, and the use of pilot surveys and feedback advised on questionnaire wording and supplementary text to ensure the context and content of the questions was unambiguous.
Experimenter Bias	The lead researcher may be biased towards results that would support a belief or theory.	The two data collection surveys were based on three previous research studies. By repeating and linking existing research and correlating the results, the ability to bias the results was reduced.

Table 07

External Validity

This research study has external validity if the results obtained would apply to other similar situations or organisations, and the results from this sample group generalise to a larger population

The following are relevant threats which reduce external validity and were reviewed to understand if measures should be executed to control these individual threats.

Threat	Issue	Mitigation
Demand Characteristics	If the research study subjects become wise to anticipated results they begin to exhibit performance that they believe is expected of them, and may try to produce 'good' data for the researcher	The survey instrument was designed to ensure the respondents are not provided with cues to the anticipated results or outcomes of the research study
Interaction Effects	The survey instrument can affect the participants differently depending on their personal characteristics, history or experiences, and their degree of motivation	A range of participants (74) was selected to counterbalance the impact, and the results were correlated.

Table 08

Reliability

This research study has reliability if the same study can be repeated and arrive at the same conclusions, including the consistency of the surveys, and the accuracy of the results.

Threat	Issue	Mitigation
Inter-Rater	Reliability of observations	The results were correlated. Each of the 38 different alignment factors and their contribution to the parent alignment criteria were positively correlated to the four IS success factors, to be sure that they were measuring the same constructs.

Table 09

Chapter 4 Results

4.1 Results from First Survey

4.1.1 Business/IT Alignment Assessment Maturity Level

For the six alignment criteria of communications, value measurement, governance, partnership, technology, and HR skills the first survey asked either six or seven questions about each criterion; a total of 38 questions in all. The 51 participants scored each question on the questionnaire between levels 1 – strongly disagree and level 5 – strongly agree. By considering each response scored from 1 to 5 for the survey population, the average score was calculated for each question, and then for each criterion and finally compiled to an overall average maturity score.

The overall average business/IT alignment maturity level was 2.41, which corresponds to a level 2 or ‘committed process’. The score for each of the six criteria is shown in figure 14.

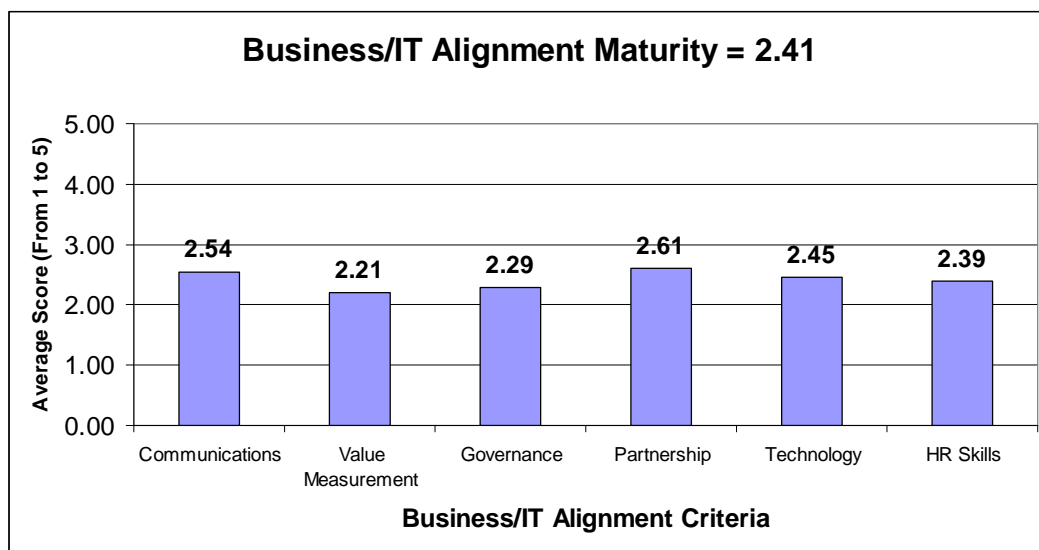


Figure 14

The highest scoring criterion was *partnership*, and the lowest scoring criterion was *value measurement*.

The contribution of each of the alignment factor questions (Q1 to Q7) average scores towards their parent alignment criterion average score is shown in table 10. Although

the overall result was level 2, five factors scored at a higher level 3 (shown in green) and eight factors scored at a lower level 1 (shown in yellow).

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Average
Communications	3.04	2.84	1.92	3.47	2.22	1.76		2.54
Value Measurement	2.29	2.59	1.96	2.55	1.90	2.04	2.12	2.21
Governance	2.31	2.14	2.57	2.63	1.84	2.27		2.29
Partnership	2.47	2.39	3.12	2.75	2.82	2.10		2.61
Technology	2.49	3.12	2.51	2.43	1.86	2.27		2.45
HR Skills	2.71	1.94	2.71	3.14	2.20	1.75	2.29	2.39

Table 10

The individual high and low scoring alignment factor questions are shown in table 11.

Criteria	Factor	Score
Communications	Does IT understand the Business and its needs?	3.04
	The style of interaction between Business and IT staff	3.47
	Understanding and learning about the Business and it's processes by IT staff	1.92
	The liaison or working relationship between the Business and IT staff	1.76
Value Measurement	The linkage between Business and IT Metrics	1.96
	Are Benchmarking exercises undertaken for IT services provided to the Business	1.90
Governance	The number and frequency of meetings of Business/IT Steering Committee(s)	1.84
Partnership	The sharing of and attitudes about Risks and Rewards between IT and the Business	3.12
Technology	How well defined are the IT Standards for computer hardware, software, and systems	3.12
	The level of integration of IT systems with External Partners	1.86
HR Skills	Who makes the Key IT Decisions	1.94
	What is the Organisation's attitude to Change	3.14
	What are the opportunities for cross-functional training and job rotation	1.75

Table 11

The overall result of 2.41 was lower than expected. In their analysis of 197 companies, Luftman & Kempaiah (2007) quoted the average for the manufacturing sector as 3.15 or level 3. In all, 75% of USA companies were at level 3 or above, with 64% at level 3, and only 12% at level 2.

4.1.2 Six Alignment Criteria

For each of the six criteria shown in table 10, the contribution of each alignment factor question's score is shown in graphical and tabular form. In each table a green row indicates a higher level 3 result and yellow indicates a lower level 1 result.

Appendix b contains the detailed responses to each question in survey 1.

Communications Questions 1 to 6

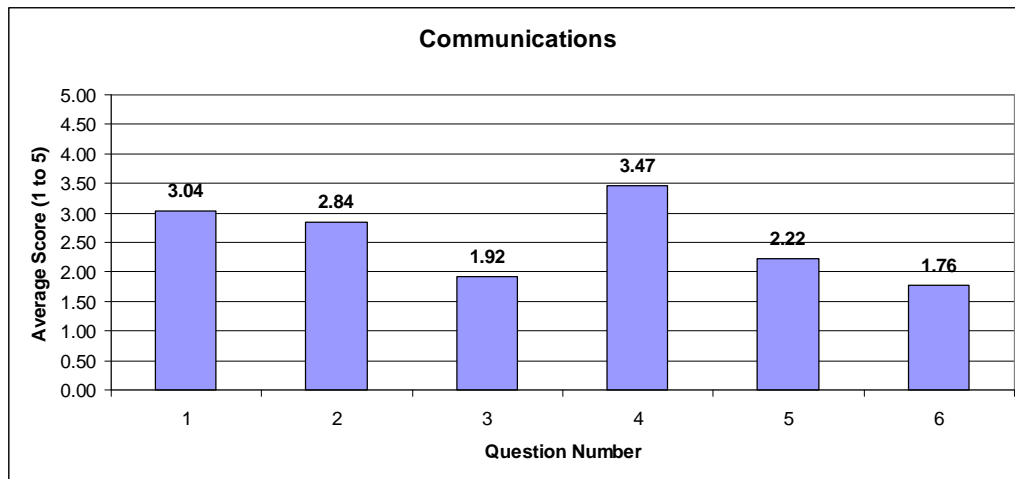


Figure 15

Question	Communications between the Business and IT
1	Does IT understand the Business and its needs?
2	Does the Business understand IT and its needs?
3	Understanding and learning about the Business and its processes by IT staff
4	The style of interaction between Business and IT staff
5	The extent of Information and Knowledge Sharing
6	The liaison or working relationship between the Business and IT staff

Table 12

Value Measurement Questions 1 to 7

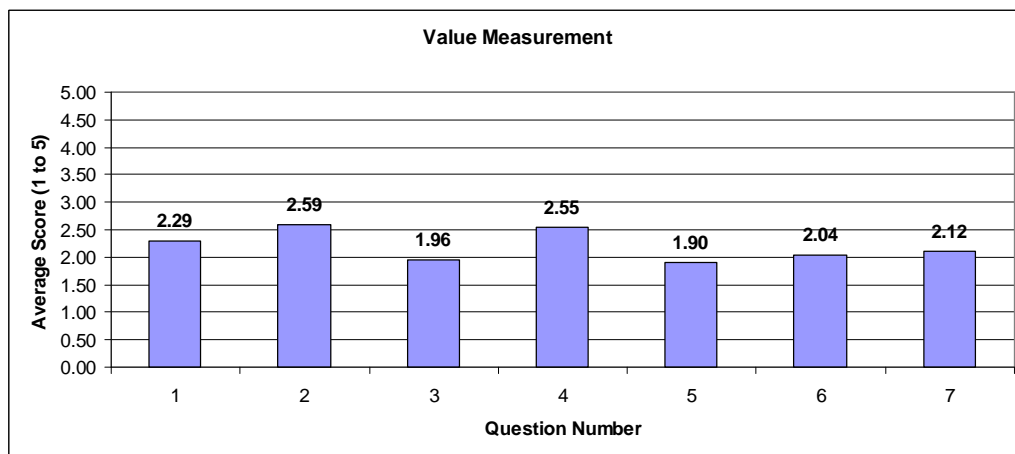


Figure 16

Question	Value Measurement
1	The way IT Metrics are presented to the Business.
2	How Business Metrics are presented
3	The linkage between Business and IT Metrics
4	Are Service Level Agreements in place for IT services provided to the Business
5	Are Benchmarking exercises undertaken for IT services provided to the Business

6	Are there formal assessments following the implementation of an IT Investment or project
7	Are there Continuous Improvement processes in place to improve Business/IT alignment

Table 13

Governance Questions 1 to 6

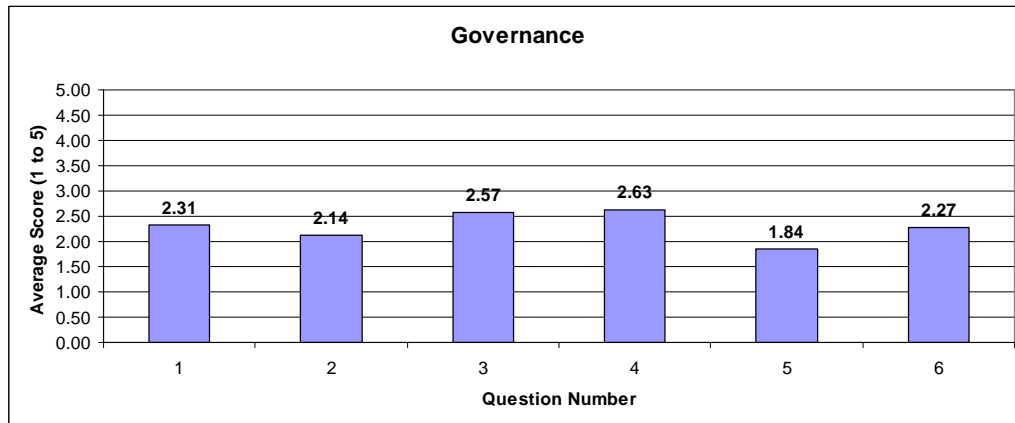


Figure 17

Question	Governance
1	The level of input from IT during Business Strategy Planning
2	The level of input from the Business during IT Strategy Planning
3	How IT is Budgeted
4	What is the rationale for IT Spending
5	The number and frequency of meetings of Business/IT Steering Committee(s)
6	How Projects are Prioritised by the Business and IT

Table 14

Partnership Questions 1 to 6

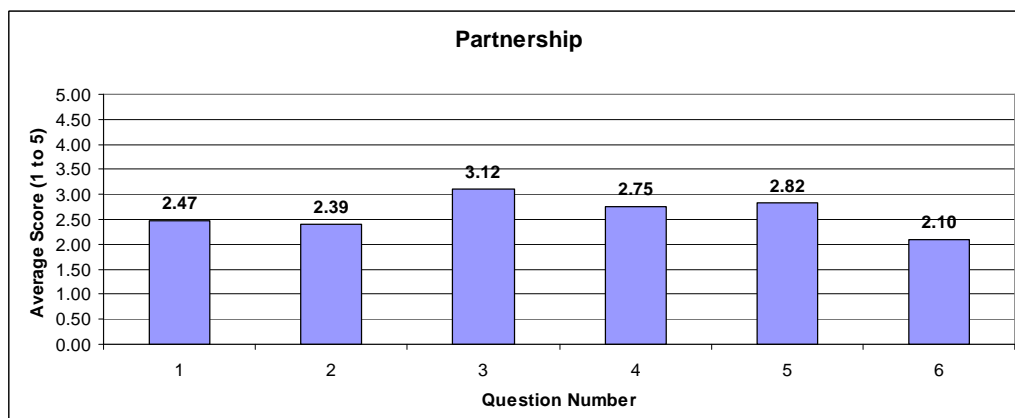


Figure 18

Question	Partnership
1	The Business perception of the value of IT
2	The role of IT in Strategic Business Planning

3	The sharing of and attitudes about Risks and Rewards between IT and the Business
4	Management of the Business/IT Relationship
5	The relationship between IT and the Business
6	The presence and participation of Business Sponsors/Champions for IT projects

Table 14

Technology Questions 1 to 6

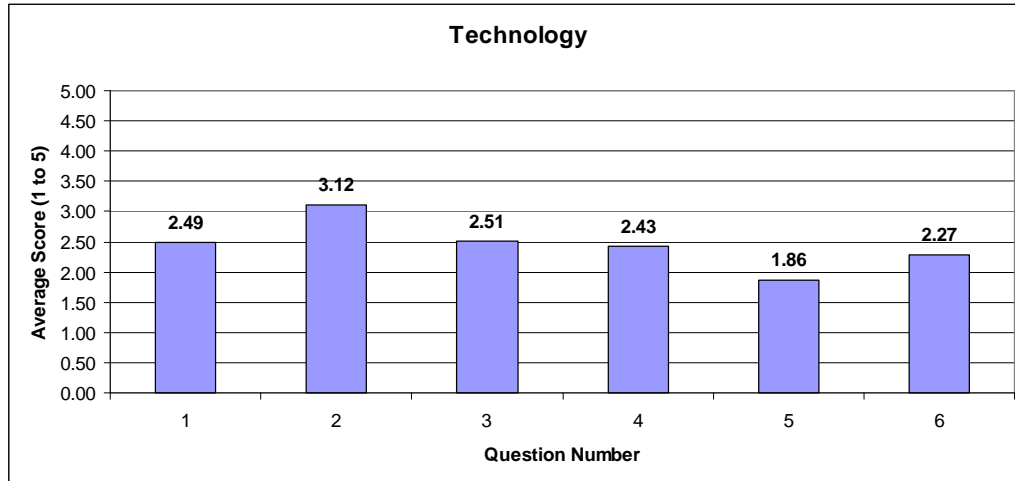


Figure 19

Question	Technology
1	How far have the primary IT systems evolved
2	How well defined are the IT Standards for computer hardware, software, and systems
3	The level of integration of IT systems within each Functional Department (e.g Within an Engineering Department)
4	The level of integration of IT systems between Functional Departments (e.g Between an Engineering Department and a Manufacturing Department)
5	The level of integration of IT systems with External Partners (e.g Suppliers, Customers)
6	How the flexibility of IT Systems are perceived

Table 15

Human Resource Skills Questions 1 to 7.

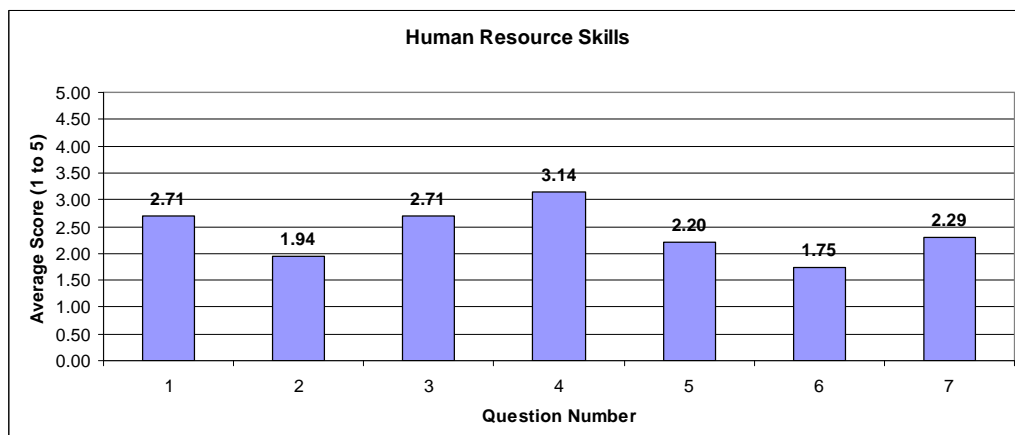


Figure 20

Question	Human Resource Skills
1	The attitudes to creating and working within an innovative and entrepreneurial environment
2	Who makes the Key IT Decisions
3	What is the Organisation's predominant management style
4	What is the Organisation's attitude to Change
5	Are there career crossover opportunities between functions
6	What are the opportunities for cross-functional training and job rotation
7	The level and quality of Social Interaction between IT and the business

Table 16

4.1.3 Correlation of Results between Strategic, Tactical and Operational Levels

The 51 respondents were categorised by hierarchical level into the following sets:

- 1) Senior Management (8 Respondents)
- 2) Middle Management (18 Respondents)
- 3) Team Leaders (25 Respondents)

They were also categorised by functional group into the following sets:

- 4) IT (6 Respondents)
- 5) Business (Non-IT) (45 Respondents)

For each of these five sets, the contribution of each of the six alignment criteria's question (Q1 to Q7) scores is shown in appendix c. For each of these five sets, table 17 shows the distribution of the 38 factors scores between alignment levels and the set's average alignment score in comparison to the overall result.

Set	Type	Level 1	Level 2	Level 3	Score
<i>Overall</i>		21%	68%	11%	2.41
Senior Management	Hierarchical	37%	50%	13%	2.27
Middle Management	Hierarchical	29%	58%	13%	2.37
Team Leaders	Hierarchical	8%	79%	13%	2.48
Business (Non-IT)	Functional	8%	74%	18%	2.58
IT	Functional	50%	45%	5%	1.98

Table 17

By hierarchical level, the senior and middle managers had markedly more low scoring factors than the team leaders. The other clear observation was the IT score of 1.98

(Level 1) compared to business score of 2.58 (Level 2). This should be expected based on an observation by Luftman & Kempaiah (2007), although a difference of one whole level was not foreseen.

A further insight is shown in tables 04 and 05 in appendix c. The business scored 'Partnership' as the highest criterion and 'Value Measurement' as lowest, while IT scored 'Partnership' as lowest and 'Value Measurement' as highest! It would appear that IT appreciation of their strengths and weaknesses are 180° out of phase with their business customers.

For each of these five sets the scores for the six criteria shown in appendix c were compared and correlated as shown in table 18, where green indicates a strong correlation, yellow a moderate correlation and white is weak.

	To Senior Management	To Middle Management	To Team Leaders	To Non IT	To IT
Overall	0.79	0.93	0.95	0.94	0.60
Senior Management	X	0.61	0.70	0.66	0.59
Middle Management	0.61	X	0.80	0.95	0.37
Team Leaders	0.70	0.80	X	0.85	0.71
Non-IT	0.66	0.95	0.85	X	0.42
IT	0.59	0.37	0.71	0.42	X

Table 18

This shows that each business group's results correlated strongly to the overall result. However, the IT set had a moderate correlation to the overall result, and to all the other sets other than the team leaders. Another observation was that the senior management correlation to all the others was moderate, indicating a slight disconnect between the views on IT alignment between the strategic and tactical/operational levels.

Finally the results from table 11 were sorted by score to identify any significant factors and to assist in selecting the top level 3 and bottom level 1 factors on which to request feedback in the second survey. The results are shown in table 19.

Criteria	Factor	Score	Selected
Communications	The style of interaction between Business and IT staff	3.47	Y
HR Skills	What is the Organisation's attitude to Change	3.14	Y
Partnership	The sharing of and attitudes about Risks and Rewards between IT and the Business	3.12	Y
Technology	How well defined are the IT Standards for computer hardware, software, and systems	3.12	
Communications	Does IT understand the Business and its needs?	3.04	
Value Measurement	The linkage between Business and IT Metrics	1.96	
HR Skills	Who makes the Key IT Decisions	1.94	
Communications	Understanding and learning about the Business and its processes by IT staff	1.92	
Value Measurement	Are Benchmarking exercises undertaken for IT services provided to the Business	1.9	Y
Technology	The level of integration of IT systems with External Partners	1.86	Y
Governance	The number and frequency of meetings of Business/IT Steering Committee(s)	1.84	Y
Communications	The liaison or working relationship between the Business and IT staff	1.76	Y
HR Skills	What are the opportunities for cross-functional training and job rotation	1.75	Y

Table 19

The best alignment factor was ‘the style of interaction between the business and IT staff’; this could be attributed to the time of service, and friendly approach of the on-site IT staff. It is an interesting observation that the 2nd lowest factor was ‘the liaison or working relationship between the business and IT staff’, which again appears 180° out of phase with the previous observation. Both factors relate to communication, which has often been a challenge between business and IT staff.

4.2 Results from Second Survey

4.2.1 Recommendations for introduction of IT Governance Practices

The five lowest scoring individual alignment factors shown in table 20 were positioned within the relevant criteria section and presented to the 34 participants. They were each asked to select two IT governance practices improvement ideas from several multi-choice options on the questionnaire; the results were collated and are shown in tabular format. Within each table, the top three recommendations are highlighted.

Criteria	Factor
Communications	The liaison or working relationship between the Business and IT staff
Value Measurement	Are Benchmarking exercises undertaken for IT services provided to the Business
Governance	The number and frequency of meetings of Business/IT Steering Committee(s)
Technology	The level of integration of IT systems with External Partners
HR Skills	What are the opportunities for cross-functional training and job rotation

Table 20

Recommendations for IT Governance Practices for Communication Criteria

5. 'The liaison or working relationship between the Business and IT staff' This scored weakly, with an average of 1.76 (Level 1) out of 5. Please select the top two ideas that you believe would improve things.	
Answer Options	Response Percent
Business/IT committees to oversee IT applications, projects and operational issues at SMT, Middle Manager, and Team Leader level	33%
Quarterly Feedback Sessions from a corporate IT Business Relationship Manager on IT strategy, core applications and issues	10%
IT Representative to attend Monthly Divisional Meetings	15%
Quarterly Feedback Sessions from our IT Business Partner on their IT processes. Logging, prioritisation, escalations and support of IT issues	7%
Annual User Satisfaction Survey	7%
Annual End User workplace 'healthchecks' to identify IT opportunities and needs	11%
Create an IT Balanced Scorecard with Business Representatives which reflects and measures the Business and User Needs	18%
None of These	0%

Table 21

Recommendations for IT Governance Practices for Value Measurement Criteria

7. 'Are Benchmarking exercises undertaken for IT services provided to the Business' This scored weakly, with an average of 1.90 (Level 1) out of 5. Please select the top two ideas that you believe would improve things.	
Answer Options	Response Percent
Publish Monthly Report on IT Helpdesk Performance and IT Systems availability on Intranet	17%
Publish Incident Reports for IT system failures, and corrective actions on Intranet	10%
Publish Local IT KPIs (Key Performance Indicators) in League table with other Group X or IT Business Partner supported Manufacturing Sites	34%
3rd Party Review and Benchmarking Report of current IT performance	5%
Post implementation IT project reviews	21%
Business review of Contractual IT Business Partner IT KPIs	10%
None of These	2%

Table 22

Recommendations for IT Governance Practices for Governance Criteria

8. 'The number and frequency of meetings of Business/IT Steering Committee(s)'. This scored weakly, with an average of 1.82 (Level 1) out of 5. Please select the top two ideas that you believe would improve things	
Answer Options	Response Percent

Business/IT committees to oversee IT applications, projects and operational issues at SMT, Middle Manager and Team Leader level	21%
A seat on Business Projects for an IT representative, either local or Group X IT Business Relationship Manager	21%
Programme Management (To Manage and Publish Information on all cross-functional Location X projects)	10%
Quarterly Feedback Briefings from a corporate Group X IT Business Relationship Manager on IT strategy, core applications and issues	17%
Undertake joint Business Process Re-engineering projects to identify opportunities to utilise IT technology	14%
Monthly e-mail summary to all employees with Intranet links to updates and information on key Location X projects	17%
None of These	0%

Table 23

Recommendations for IT Governance Practices for Technology Criteria

10. 'The level of Integration of IT systems with External Partners (e.g Suppliers, Customers)' This scored weakly, with an average of 1.85 (Level 1) out of 5. Please select the top two ideas that you believe would improve things	
Answer Options	Response Percent
Undertake joint Business Process Re-engineering projects to identify opportunities to utilise IT technology	26%
Process Map our business processes to include interfaces to customers and suppliers and look to implement appropriate software solutions	25%
Leverage support from Corporate Business Partner Management who create 3rd party connectivity for various outsourcing solutions	3%
Quarterly Briefings from a corporate Group X IT Business Relationship Manager on IT Strategy, Core Applications and Issues	7%
Implement Standard Corporate IT Enterprise Applications (e.g SAP to replace JDEdwards)	18%
Introduce Paperless Office and Workflow Applications	20%
None of These	2%

Table 24

Recommendations for IT Governance Practices for Human Relationship Skills Criteria

11. 'What are the opportunities for cross-functional training and job rotation' This scored weakly, with an average of 1.75 (Level 1) out of 5. Please select the top two ideas that you believe would improve things	
Answer Options	Response Percent
Cross-Train IT staff in Key Business Processes with key 'power' users	25%
Rotate IT Staff into Business Roles	10%
Staff Development Targets to Include Opportunities for Job Rotation within Departments at Location X	13%
Staff Development Targets to Include Opportunities for Job Rotation within Group X or Corporate	8%
Key Staff to cross train and become familiar with the processes of their internal customers and suppliers	23%
Undertake inter-departmental Business Process Re-engineering projects to identify opportunities to industrialise our processes	20%
None of These	2%

Table 25

The results are collated in table 26, and the following operational IT governance practices are recommended to be considered for implementation to improve alignment between the business and IT.

Communication	Recommendation
1	Business/IT committees to oversee IT applications, projects and operational issues at SLT, Middle Manager, and Team Leader level
2	IT Representative to attend Monthly Divisional Meetings
3	Create an IT Balanced Scorecard with Business Representatives which reflects and measures the Business and User Needs
Value Measurement	
1	Publish Monthly Report on IT Helpdesk Performance and IT Systems availability on Intranet
2	Publish Local IT KPIs (Key Performance Indicators) in League Table with other Group Manufacturing Sites
3	Post implementation IT project reviews
Governance	
1	Business/IT committees to oversee IT applications, projects and operational issues at SLT, Middle Manager and Team Leader level
2	A seat on Business Projects for an IT representative, either local or Corporate IT Business Relationship Manager
3	Quarterly Feedback Briefings from a corporate IT Business Relationship Manager on IT strategy, core applications and issues
Technology	
1	Monthly e-mail summary to all employees with Intranet links to updates and information on key Site projects
2	Undertake joint Business Process Re-engineering projects to identify opportunities to utilise IT technology
3	Process Map our business processes to include interfaces to customers and suppliers and look to implement appropriate software solutions
4	Introduce Paperless Office and Workflow Applications
HR Skills	
1	Cross-Train IT staff in Key Business Processes with key 'power' users
2	Key Staff to cross train and become familiar with the processes of their internal customers and suppliers
3	Undertake inter-departmental Business Process Re-engineering projects to identify opportunities to industrialise our processes

Table 26

The three highest scoring individual alignment factors shown in table 27 were positioned within the relevant criteria section and presented to the 34 participants. They were each asked to write an 'open ended' reason why this factor worked well on the questionnaire, and the results were tabulated as shown in appendix d.

Criteria	Factor
Communications	The style of interaction between Business and IT staff
Partnership	The sharing of and attitudes about Risks and Rewards between IT and the Business
HR Skills	What is the Organisation's attitude to Change

Table 27

The responses have been summarised in table 28, shown below.

Factor	Summary
The style of interaction between Business and IT staff	Appreciation of friendly and helpful approach of local IT staff, not as keen on corporate helpdesk/processes.
The sharing of and attitudes about Risks and Rewards between IT and the Business	Focus on generally positive existing long term relationship with local IT staff and degree of established trust around risk
What is the Organisation's attitude to Change	High level of acceptance of change

Table 28

4.2.2 Evaluation of Success during Post-Merger Integration of IT

To measure the success of the integration from a technical and business perspective, the second survey asked four questions. The 34 participants were asked to evaluate the success by scoring each question on the questionnaire between levels 1 – low score, to level 4 – high score. By considering each response scored from 1 to 4 for the survey population, the average score was calculated for each of the question.

The results were collated and are shown in tabular format. Within each table, the highest score is highlighted

Success of IT Integration Processes

1. Please express your overall satisfaction with the IT Integration Processes, e.g The rollout of PCs in 2007, the connection to the Corporate Network, and the implementation of new corporate software systems or solutions.		
Answer Options	Score	Response Percent
Successful	4	58%
Somewhat Successful	3	23%
Mixed Results	2	19%
Somewhat Unsuccessful	1	0%

Table 29

Success of IT Integrated Information Systems

2. Please express your overall satisfaction with the Integrated Information Systems, e.g. Corporate software solutions; JDEdwards, SAP; e-mail, intranet, etc		
Answer Options	Score	Response Percent
Successful	4	35%
Somewhat Successful	3	48%
Mixed Results	2	16%
Somewhat Unsuccessful	1	0%

Table 30

Success of IT Function to Exploit Merger Opportunities

3. Please express your overall satisfaction with the ability of IT Function to exploit our merger opportunities, e.g. growth, higher profitability, through Supply Chain rationalisation, manufacturing rationalisation, etc		
Answer Options	Score	Response Percent
Excellent	4	0%
Good	3	29%
Average	2	58%
Poor	1	13%

Table 31

Success of IT Function to Avoid Merger Problems

4. Please express your overall satisfaction with the ability of the IT Function to avoid merger problems, e.g. ability to see problems early in the supply chain, manufacturing, quality issues, customer issues, etc		
Answer Options	Score	Response Percent
Excellent	4	0%
Good	3	32%
Average	2	52%
Poor	1	16%

Table 32

The overall post-merger IT success assessment results are shown in table 33.

	Integration Processes	Integration Systems	Exploit Merger Opportunities	Avoid Merger Issues
Score	3.41	3.21	2.18	2.18
Result	Somewhat Successful	Somewhat Successful	Average	Average

Table 33

In terms of the IT strategy, the results confirm a positive view of the IT infrastructure integration, which had previously received good feedback in a post project review.

There was also a surprising level of contentment with the corporate software systems, which is not evident in daily process issue discussions with staff.

In terms of the Business strategy, lack of staff familiarity around the subject of mergers and acquisitions, and how to judge a good one from a bad one could make this factor somewhat subjective.

4.2.3 Correlation between Alignment Factors and Success of Post-Merger Integration

The results from these four IT success evaluation questions (scored from 1 to 4) of the 34 participants of the second survey were correlated to their responses to the 38 individual alignment factor questions (scored from 1 to 5) from the first survey. To discover any correlation between the four IT success evaluation responses and the six alignment criteria, the individual alignment factors scores were added together to make a composite score for each criteria.

To measure the strength of the relationship between these factors, the following correlation coefficient has been calculated based on a population of 34; the results are shown in table 34.

Significance of Co-efficient at 1% (moderate correlation)

+/- 0.43

Significance of Co-efficient at 5% (weak correlation)

+/- 0.34

	Alignment Criteria and Individual Alignment Factor	Integration Processes	Integration Systems	Exploit Merger Opportunities	Avoid Merger Issues
	Communications between the Business and IT	-0.05	-0.05	0.42	0.33
1	Does IT understand the Business and it's needs?	0.22	0.15	0.28	0.15
2	Does the Business understand IT and it's needs?	0.01	-0.11	0.23	0.20
3	Understanding and learning about the Business and it's processes by IT staff	-0.07	0.07	0.27	0.23
4	The style of interaction between Business and IT staff	-0.19	-0.14	0.41	0.30
5	The extent of Information and Knowledge Sharing	0.07	0.04	0.16	0.31
6	The liaison or working relationship between the Business and IT staff	-0.16	-0.16	0.31	0.10
	Value Measurement	0.07	0.03	0.39	0.10
1	The way IT Metrics are presented to the Business.	0.14	-0.06	0.32	0.16
2	How Business Metrics are presented	0.00	-0.07	0.10	-0.24

3	The linkage between Business and IT Metrics	-0.15	-0.01	0.32	0.09
4	Are Service Level Agreements in place for IT services provided to the Business	0.20	-0.03	0.00	-0.20
5	Are Benchmarking exercises undertaken for IT services provided to the Business	0.01	0.10	0.41	0.21
6	Are there formal assessments following the implementation of an IT Investment or project	0.02	0.18	0.34	0.33
7	Are there Continuous Improvement processes in place to improve Business/IT alignment	0.04	0.07	0.32	0.20
	Governance	0.12	0.17	0.47	0.26
1	The level of input from IT during Business Strategy Planning	0.03	-0.08	0.25	0.27
2	The level of input from the Business during IT Strategy Planning	0.17	0.22	0.37	0.23
3	How IT is Budgeted	0.23	0.16	0.34	0.17
4	What is the rationale for IT Spending	0.08	0.41	0.20	0.10
5	The number and frequency of meetings of Business/IT Steering Committee(s)	0.05	-0.05	0.29	0.05
6	How Projects are Prioritised by the Business and IT	-0.12	-0.10	0.14	0.08
	Partnership	-0.08	0.00	0.26	0.39
1	The Business perception of the value of IT	0.09	0.17	0.01	0.15
2	The role of IT in Strategic Business Planning	0.03	0.13	0.16	0.28
3	The sharing of and attitudes about Risks and Rewards between IT and the Business	-0.24	-0.25	-0.22	-0.06
4	Management of the Business/IT Relationship	-0.04	0.02	0.28	0.24
5	The relationship between IT and the Business	0.06	0.10	0.34	0.47
6	The presence and participation of Business Sponsors/Champions for IT projects	-0.10	-0.02	0.26	0.31
	Technology	0.01	0.19	0.39	0.36
1	How far have the primary IT systems evolved	-0.07	0.09	0.12	0.21
2	How well defined are the IT Standards for computer hardware, software, and systems	0.23	0.11	0.08	-0.20
3	The level of integration of IT systems within each Functional Department	0.06	0.22	0.33	0.18
4	The level of integration of IT systems between Functional Departments	0.07	0.21	0.26	0.33
5	The level of integration of IT systems with External Partners (e.g Suppliers, Customers)	-0.15	-0.06	0.32	0.11
6	How the flexibility of IT Systems are perceived	-0.09	0.11	0.23	0.56
	Human Resource Skills	-0.04	-0.06	0.20	0.16
1	The attitudes to creating and working within an innovative and entrepreneurial environment	-0.25	-0.02	-0.04	-0.15
2	Who makes the Key IT Decisions	-0.12	-0.01	-0.02	0.12
3	What is the Organisation's predominant management style	0.17	0.24	0.20	0.31
4	What is the Organisation's attitude to Change	0.12	-0.10	0.02	0.13
5	Are there career crossover opportunities between functions	-0.04	-0.20	0.14	-0.13
6	What are the opportunities for cross-functional training and job rotation	0.13	0.03	0.09	0.22
7	The level and quality of Social Interaction between IT and the business	-0.16	-0.11	0.36	0.13

Table 34

The more significant (1%) correlation alignment criteria and factors are summarised in table 35.

Success Factor	Criteria	Factor	(Parent Criteria)
Integration Processes	None	None	
Integrated Systems	None	None	
Exploit Merger Opportunities	Governance		
Avoid Merger Issues		The relationship between IT and the Business	Partnership
Avoid Merger Issues		How the flexibility of IT Systems are perceived	Technology

Table 35

In the consideration of the site's performance during the post-merger IT integration, the results show that there is no apparent connection between alignment and the technical perspective, including the rollout of computer hardware and Information Systems. From a business perspective, there was a positive link between the overall IT governance criterion and the ability to seize merger opportunities. The individual alignment factors of 'the relationship between IT and the business', and 'how the flexibility of the IT systems are perceived' enabled the business to avoid merger problems.

Chapter 5 Discussion

The results presented in chapter 4 are examined in the context of the literature review of chapter 2 and the aims of the research project. The limitations of the study on the results are also considered.

5.1 Comparisons with Literature Review

5.1.1 Business/IT Alignment

The overall result of 2.41 was lower than expected, and is equivalent to level 2 of the 5 level Luftman (2003) maturity model, which is shown in figure 06. Typical descriptive phrases at this level include ‘the business and IT have limited understanding of each others roles’, ‘management interactions between IT and the business tend to be transaction based’ and ‘IT spending relates to basic operations’. All of these statements correctly describe the past and current alignment condition. However, the risk in assigning an overall level 2 ‘label’ is not to recognise the progression within each of the six alignment criteria. This is reflected by the distribution of the 38 individual alignment factor scores; with 8 at level 1, 25 at level 2, and 5 at level 3.

In Luftman & Kempaiah (2007) the average alignment score for the manufacturing sector is quoted at 3.15, with technology typically as the highest scoring criteria and HR skills as the lowest. This case study found partnership was the highest and value measurement was the lowest.

In comparison between the highest scoring criteria, the manufacturing sites are towards the end of a two year company strategic IS consolidation plan, and the IS applications and technology could be considered as somewhat under developed and score lower than standard. The stressful post-merger integration process has brought functional groups closer together to solve major problems and has created a great sense of partnership throughout the site.

In comparison of the weakest scoring criteria, again the adversity of the post-merger situation has created a positive change management environment, which is reflected in a higher HR skills score than a company in steady state. Value management in the

form of benchmarking, non-technical metrics, and project reviews are immature and unpublished, and a low score for this criterion is a valid observation.

The sharing of a second hand (and unfair) management comment nicely wraps up this section “the business doesn’t give a s... about IT, and IT don’t give a s... about the business”, so perhaps level 2 is realistic, all things considered.

5.1.2 IT Governance Practices

The historic lack of IT governance practices has many contributing factors, including the high profitability of the business which has helped maintain the status quo, and provided no impetus to harness IT to create a competitive edge. The rare historic spending on Information Systems was generally financially driven and often around the withdrawal of commercial support for older applications. A major factor within this business sector is compliance and a marked preference for paper based records, which negate the need for expensive software validation.

The current state of IT governance could be linked to the identification of IT as a major source of synergy and cost savings as part of the M&A motivation. Since acquisition the level of IT governance has not greatly improved, with little regular exposure at individual locations to IT (BRM) business relationship management. The focus of BRM has been at corporate level, heralding and supporting the two year company-wide roadmap of IT integration. To reduce costs the IT infrastructure and service desk functions have been outsourced and this has impacted the level of engagement of the local IT staff, although long-standing friendships and professionalism have kept a viable support structure in place. An interesting result from the survey was that IT scored 19 individual alignment factors poorly at level 1, while the business scored only 3 alignment factors at level 1. There is almost a lack of confidence within IT that their contribution is either not good enough or not important, perhaps a reflection of the split up of the group and loss of management representation at senior level on-site.

The operational IT governance practices identified in the second survey as improvements for each poorly scoring alignment factor are compared to the seven IT

governance practices identified by De Haes and Van Grembergen's (2008a) to be present in high-performing organisations, and shown in table 36.

De Haes & Van Grembergen (2008)	Results
IT steering committee	✓
IT project steering committee	✓
Portfolio management	
IT budget control and reporting	
CIO reporting to the CEO/COO	
Project governance/management methodologies	✓
IT leadership	

Table 36

The recommendations are generally around better project management practices. Requests included improved project management methodologies, appropriate steering committees, better availability of information on projects and post-project effectiveness reviews. It was a surprise that tactical management wanted more involvement in IT projects, as they have voiced little interest to date; also that many of their ideas are non-confrontational and inexpensive to implement. Staff wanted to address basic communication deficiencies by regular publishing of existing information and including IT staff in departmental meetings. It had been feared that their ideas would be more radical and require escalation, such as commercial re-negotiation of inadequate service levels.

5.1.3 Post-Merger IT Integration Success

There was some hesitation around the four success questions, as the previous Stylianou, Jefferies, and Robbins (1996) experiment had gathered the views of IT staff on end-user satisfaction. The second survey directly asked business and IT users for an expression of their overall satisfaction for each item. There was also debate on whether the four questions designed to measure business/IT alignment outputs were broadly covered within the Luftman (2003) SAM questionnaire. Overall it was felt that to ask the end-users directly was an enhancement of the original method, and that the M&A condition is complex and the four additional questions supplemented the knowledge gained from the previous instrument.

In consideration of the four success criteria results, the highest score of the integration processes was expected and pleasing as it confirmed a well received IT infrastructure and PC migration project, which has been held up as a 'model' site rollout.

The lower score for the Integrated Systems reflects the lack of corporate focus on IS development at the manufacturing sites. The information systems have remained virtually unchanged on-site, and have historically lacked the functionality and innovation to enhance business processes. However, the score was higher than expected and perhaps reflects a lack of business experience in flexible software solutions.

The scoring around the business strategies could be somewhat subjective and based on prior staff experiences of M&A, which is almost non-existent. The reasonable score around avoiding merger issues is an accurate reflection of this achievement, although some negative impacts of recent supply chain changes may have filtered into the results.

The converse question around the ability of the IT function to exploit merger opportunities scored less than expected, with a lack of recognition of IT infrastructure work undertaken by IT to support the recruitment of additional staff, and the transfer of IS systems from the manufacturing site in the USA. This could be due to poor communications, as everyone is aware of facilities and production equipment upgrades on-site.

5.2 Business/IT Alignment Factors Contributing to a Successful IT Integration

In the consideration of a link between business/IT alignment and user satisfaction with the post-merger IT integration, the alignment criterion of governance appears to have a statistically significant correlation in the exploitation of post-merger opportunities. From the literature review this is logical, since governance is about the level of strategic business and IT planning, and how IT resources are budgeted and prioritised. Another significant aspect is the selection and management of IT projects and all of these factors will aid any major IT initiative underpinning a significant business project.

However, in the first survey IT governance scored 2nd lowest, so it appears that staff feel IT governance is an important factor in a successful post-merger IT integration, but the performance of this criterion is a lack-lustre 2.29. The correlation could be a result of statistical coincidence, or there is the prospect that by increasing the number of steering committees, by providing better project prioritisation and by improved IT budgeting we could have exploited more merger opportunities.

The correlation of avoiding merger problems and the single alignment factor of ‘the relationship between IT and the business’ is important as all working relationships within support functions are strained during an M&A, given the high degree of uncertainty and change, and that the focus should be on quality of the relationships and mutual trust.

The correlation of avoiding merger problems and the single alignment factor of the ‘flexibility of IT systems’ is interesting, as it is acknowledged at the higher levels of IT alignment as a key investment for long-term progress and is surprising ahead of the other factors at the site. A concern would be if there had been a less distant BRM relationship with the corporate IT function, and we had centralised our IS applications quicker, would we have lost local system flexibility and hit more merger problems?

It was a surprise that there was no correlation with the communications criterion, since high quality communications with IT has been a historic issue. Communications through meetings, progress updates and good relationship management are essential to building meaningful and supportive relationships between the business and IT.

Finally, the total lack of connection between IT alignment and the hardware integration processes was a revelation, as the business could be prepared to accept computer hardware and a project roll-out as presented by IT without consultation. Also the poor correlation between the quality of the software solutions and alignment was surprising. The business could be prepared to accept IS applications as tools for the job with scant attention to their functionality. Both of these elements conform to the old-fashioned view of IT owning the technical hardware and software as landlords, and the business having tenancy and transactional responsibility.

5.3 Limitations of Research Approach

The limitations of the research on correlation between alignment factors and successful IT post-merger integration are primarily around the limited population of 34, within a single manufacturing business unit preoccupied with a couple of hard years of integration activities. This could have introduced unique factors that may have skewed the results.

Caution should be exercised in accepting the 2.41 score. The localisation of the Luftman SAM model questionnaire recommended by Gutierrez et al. (2006) may have negated its validity. However, the major issue in the design of the first survey was the lack of understanding around the standard questionnaire, and executing a survey people didn't comprehend could have produced a less reliable result.

Chapter 6 Conclusion

Within the limitations of this case study, and in the assessment of the contribution of the six Business/IT alignment criteria to the success of a post-merger IT integration, the following moderate correlations were found:-

- 1) The 'governance' alignment criterion enabled a business to exploit the opportunities from a merger.
- 2) The individual alignment factors of 'the relationship between IT and the business' and 'how the flexibility of the IT systems are perceived', were found to enable a business to avoid the problems stemming from a merger.

There are many multi-faceted complexities within mergers and acquisitions, including unique and unforeseen complications that occur during post-merger IT integrations, and appropriate care should be taken in drawing generalised conclusions from these statistically significant results. The period of IT integration and assimilation into the acquired business takes time, during which staff experience cultural acclimatisation and different emotional states linked to changes in responsibilities and their own job security. Such significant changes impact the way staff view many things, and their satisfaction with the performance of the IT function and the IS systems can go through positive and negative phases during this extended period. As the survey is a snap-shot in time, the results could have been impacted by these variables. In order to make a stronger conclusion a larger population is required. However, due to the complexities of post-merger IT integration, it would be necessary to find a method to categorise the acquisition in terms of business sector, technology, strategic view of IT and implementation methodology, and add these factors to the correlation.

Without an IT alignment assessment prior to the post-merger integration, it is difficult to ascertain if the low alignment score is historic, or if the strategic corporate focus and lack of development of widespread IT governance practices has contributed to the low alignment score. Indeed from a strategic business perspective, does a low score reflect the correct focus of limited IT resources on the bigger company wide picture? An alternative argument is that profit is driven by ensuring every employee can

effectively and appropriately use IT at each site to do their job efficiently, reducing waste and improving processes, and that a company is a sum of all its working parts.

In summary, the case study considers the post-merger IT integration situation as a sub-set of the business/IT alignment subject, and during such testing times a supportive IT governance structure should be designed and refined, with focus on:

- 1) A strong project management framework
- 2) Appropriate steering committees cascaded into the business
- 3) Clear and frequent communications, based on high quality relationships
- 4) Flexible and SMART business benefit criteria for essential business projects

The implications of this research study are around the definition, measurement, analysis and control of improvements in the business/IT alignment process. Optimised levels of business and IT performance can be achieved by introducing the methods outlined in the study to measure the alignment outputs and processes to help identify and execute improvements in IT governance.

Chapter 7 Recommendations

This research project had both an academic learning purpose and a business objective, and the recommendations are focused in these two areas.

7.1 Academic Recommendations

7.1.1 Changes in Research Methodology

From an academic perspective the alignment maturity score of 2.41 should have been calibrated. Although the use of localisation of the standard Luftman (2003) SAM model questionnaire was recommended by Gutierrez et al. (2006), a control questionnaire should have been deployed to a control group and the results correlated.

From a practical perspective, the return rate for the second questionnaire was lower than expected and it appeared that the novelty had worn off. The business advice was to run two shorter surveys, with the results from the first leading to a reduced set of questions for the second survey. An alternative approach was to consider all of the potential IT governance practices up front, and design a single enhanced survey with programming logic to reveal and hide relevant questions on IT governance practices based on 'live' responses and scores.

The population of the survey should have been increased; this opportunity was available to survey other sites in a similar post-merger IT integration position. However the reduced size of population enabled the study to drill down on the theories and observations under the microscope of a single familiar case study.

7.1.2 Future Research

If Business/IT alignment can be considered as a closed system as shown in figure 21, then more explicit methods need to be developed to measure the outputs. This could be achieved by further investigation and extension of the empirical work by Stylianou, Jefferies, and Robbins (1996) and in comparison with research of Qrunfleh & Tarafdar (2008), and shown in table 37.

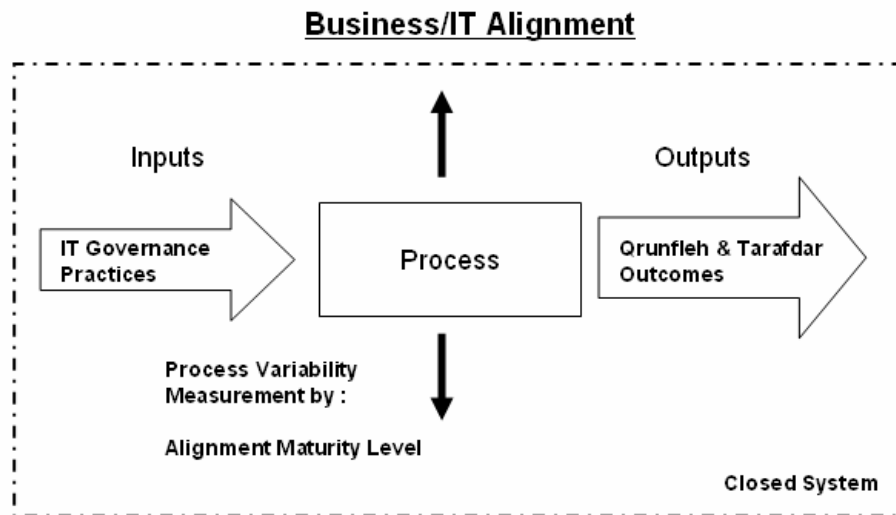


Figure 21

This could lead to the opportunity to measure and obtain further quantitative information on the outputs of user satisfaction with the IT hardware, IS software solutions, and the ability of the IT function to meet the *steady-state* needs of the Business and IT strategies of an organisation.

Stylianou, Jefferies, and Robbins (1996)	Qrunfleh & Tarafdar (2008)
User Satisfaction	
Ability to exploit merger opportunities	Enable execution of business strategy
Improved IS capability	Enable execution of IT strategy
Ability to avoid merger problems	Enable execution of business strategy
Effective IS resource utilisation during the integration process	Enable execution of IT strategy
	Enable better relationships between IT and business managers at operational level

Table 37

Through consideration of alignment within a business in steady-state rather than in a post-merger IT integration condition, the level of change and number of variables should be reduced, making a further experiment on a larger population an interesting companion research study.

7.1.3 Business Recommendations

The overall alignment maturity level of 2 is disappointing given the high-tech status of the product and manufacturing plant within the community. It would be beneficial to present the summary findings of this study to senior and IT management, and review in partnership the recommendations made on IT governance practices, selecting those that will evolve the current level of Business/IT alignment towards

level 3. This initial meeting should be developed into a regular quarterly IT governance committee with review of the implementation status of these and other appropriate initiatives. The combination of repeating the survey every 12 months and investing management resource into the governance committee will facilitate the utilisation of IT to enable the site to work smarter rather than harder, and ultimately utilise IT to sustain a competitive edge.

The other opportunity is to approach senior IT and business management and to propose executing the revised survey design recommended in section 7.1.1 at the other two manufacturing business units in the UK, to compare the results and look for synergies and learning.

Chapter 8 Personal Reflections

This research project has been a worthwhile and often testing learning experience, which has provided new knowledge in the following three areas.

8.1 Literary Research

There was the challenge of the long and often fruitless searches through countless books and on-line research papers looking for a new perspective on a popular subject, or a means to link existing threads of research. These hours of study occasionally interspersed with sparks of inspiration from authors with similar opinions. Pursuing evidence trails from one referenced article to another, gradually piecing together and honing in on a personally thought-provoking and achievable research idea.

This experience has helped me learn how to speed read academic papers and book indexes, quickly and efficiently discarding or drilling deeper in the search for key information. It has enabled me to focus on specific chapters and articles without the guilt of needing to read the whole book to understand a general field of interest.

8.2 Experimental Design

There was the stimulating challenge of framing a new view on previous research and establishing a logical argument in the creation of a new experiment through the extrapolation of previously unlinked studies. Another new concept was the need to collect experimental evidence to investigate a specific problem, and the iterative creation of electronic HTML survey tools to collect quantitative data.

This experience has opened my eyes to the possibility of harnessing electronic surveys as a way to present academic and business best practices, and gather targeted quantitative feedback to gain buy-in and to advance difficult key projects.

8.3 Statistical Observations

There was the satisfaction of downloading survey results and populating a spreadsheet, and seeing patterns in the data evolve. There was the need to become familiar with the statistical treatment and correlation of quantitative data, to progress raw data patterns into the formulation of valid information. Finally there was the

detached review of statistically significant experimental observations against theoretical concepts, to temper thought-provoking conclusions with realism in the creation of new knowledge based on a small empirical study on tactical business/IT alignment.

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Appendix A

**University of Chester
Faculty of Applied and Health Sciences
Research Ethics Committee**

A. Marley

6th August 2009

Study title: IT/Business Alignment during a Post Merger Integration

FREC reference: 293/09/AM/CSIS

Version number: 3

Thank you for sending the above-named application to the Faculty of Applied and Health Sciences Research Ethics Committee for review.

The application has been considered by the Faculty Research Ethics Committee.

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation. However, the email to be sent to interviewees (Appendix 8 Version 1) should include reference to the University of Chester.

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Response to the Committee	1	August 2009
FREC Application	3	August 2009
Appendix 1 – List of References	2	August 2009
Appendix 3 – IT Governance Study at Company X	3	August 2009
Appendix 8 – Email	1	August 2009
Appendix 9 – Participant Information Sheet	1	August 2009

With the Committee's best wishes for the success of this project.

Yours sincerely,

Mohammed Saeed

Chair, Faculty Research Ethics Committee

Enclosures Standard conditions of approval.

c.c. Supervisor
 FREC Representative

Appendix B

1). Communications between the Business and IT

Does IT understand the Business and its needs?		
Answer Options	Score	Response Percent
IT Management are not aware of business needs	1	4%
There is a limited IT awareness	2	33%
IT senior and middle management are aware	3	26%
Awareness is pushed down through the IT organisation	4	30%
Awareness is embedded in all levels of the IT organisation	5	7%

Does the Business understand IT and its needs?		
Answer Options	Score	Response Percent
Business Management are not aware of IT needs	1	0%
There is limited Business awareness	2	49%
There is emerging Business awareness	3	21%
The Business is aware of the potential of IT	4	25%
The awareness is embedded in all levels of the Business	5	5%

Understanding and learning about the Business and its processes by IT staff		
Answer Options	Score	Response Percent
Casual conversations and meetings	1	40%
Newsletters, reports, e-mail	2	25%
Training, departmental meetings	3	30%
Formal methods, sponsored by senior management	4	5%
Monitored for effectiveness	5	0%

The style of interaction between Business and IT staff		
Answer Options	Score	Response Percent
Business to IT only, formal interaction	1	5%
One-way, somewhat informal	2	14%
Two-way, formal	3	32%
Two-way, informal	4	25%
Two-way, informal and flexible	5	25%

The extent of Information and Knowledge Sharing		
Answer Options	Score	Response Percent
Ad-hoc	1	28%
Some structured sharing emerging	2	33%
Structured around key processes	3	32%
Formal sharing at all levels	4	5%

Formal sharing extended to external partners (e.g suppliers, customers)	5	2%
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The liaison or working relationship between the Business and IT staff		
Answer Options	Score	Response Percent
None or only used as needed	1	47%
Primarily an IT to Business link	2	33%
Facilitated knowledge transfer	3	12%
Facilitated relationship building	4	5%
Building relationship with external partners (e.g suppliers, customers)	5	2%

2). Value Measurement

The way IT Metrics are presented to the Business.		
Answer Options	Score	Response Percent
Technical; not related to business	1	50%
Measured in terms of cost efficiency	2	7%
Measured in traditional financial terms	3	9%
Measured in terms of effectiveness	4	30%
Extended to external partners (e.g suppliers, customers)	5	4%

How Business Metrics are presented		
Answer Options	Score	Response Percent
Ad-hoc	1	30%
At the departmental level	2	32%
Traditional financial	3	13%
Also measure customer value	4	9%
Balanced scorecard, extended to external partners (e.g suppliers, customers)	5	16%

The linkage between Business and IT Metrics		
Answer Options	Score	Response Percent
Value of IT investments are rarely measured	1	29%
Business and IT metrics unlinked	2	52%
Business and IT metrics becoming linked	3	16%
Business and IT metrics formally linked, reviewed and acted upon	4	4%
Balanced scorecard, including external partners (e.g suppliers, customers)	5	0%

Are Service Level Agreements in place for IT services provided to the Business		
Answer Options	Score	Response Percent
Sporadically present	1	21%
Expressed technically at the departmental level	2	27%
Emerging across the Business	3	32%
Throughout Business	4	18%

Extended to external partners (e.g suppliers, customers)	5	2%
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Are Benchmarking exercises undertaken for IT services provided to the Business		
Answer Options	Score	Response Percent
Seldom or never	1	48%
Sometimes informally	2	29%
May benchmark formally, seldom act	3	13%
Routinely benchmark, usually act	4	7%
Routinely benchmark, act and measure results	5	4%

Are there formal assessments following the implementation of an IT Investment or project		
Answer Options	Score	Response Percent
None	1	32%
Some; typically for problems	2	46%
Becoming a routine practice	3	13%
Routinely assess and act on findings	4	5%
Routinely assess, act and measure results	5	4%

Are there Continuous Improvement processes in place to improve Business/IT alignment		
Answer Options	Score	Response Percent
None	1	29%
Few, effectiveness not measured	2	41%
Few, starting to measure effectiveness	3	23%
Many, frequently measure effectiveness	4	5%
Practices and measures well established	5	2%

3). Governance

The level of input from IT during Business Strategy Planning		
Answer Options	Score	Response Percent
No IT input, or done as needed	1	26%
At the departmental level, slight IT input	2	23%
Some IT input and cross-functional planning	3	45%
At departmental and functional level, with IT	4	6%
With IT and external partners (e.g suppliers, customers)	5	0%

The level of input from the Business during IT Strategy Planning		
Answer Options	Score	Response Percent
None, or done as needed	1	32%
At IT departmental level, slight business input	2	28%
Some Business input and cross-functional planning	3	34%
At IT Department and functional IT level, with Business	4	6%
With Business and external partners (e.g suppliers, customers)	5	0%

How IT is Budgeted		
Answer Options	Score	Response Percent
As a cost of doing business, spending is unpredictable	1	15%
As a cost of doing business by functional organisations	2	34%
Some IT projects are treated as investments	3	32%
IT is treated as an investment	4	13%
As a Profit Centre (Internal Business)	5	6%

What is the rationale for IT Spending		
Answer Options	Score	Response Percent
Reduce Costs	1	13%
Productivity, efficiency	2	32%
As a process enabler	3	36%
As a process driver, and a strategic business enabler	4	17%
For competitive advantage, and profit	5	2%

The number and frequency of meetings of Business/IT Steering Committee(s)		
Answer Options	Score	Response Percent
Don't have them	1	38%
Meet informally as needed	2	45%
Formal committees meet regularly	3	13%
Proven to be effective	4	4%
Also include external partners (e.g suppliers, customers)	5	0%

How Projects are Prioritised by the Business and IT		
Answer Options	Score	Response Percent
Reactive to Business or IT needs	1	42%
Determined by IT function	2	15%
Determined by Business function	3	19%
Mutually determined	4	25%
External partners priorities are considered	5	0%

4). Partnership

The Business perception of the value of IT		
Answer Options	Score	Response Percent
IT is a cost of doing business	1	37%
IT is emerging as an asset	2	12%
IT enables future business activity	3	37%
IT drives future business activity	4	2%
IT partners with the business in creating value	5	14%

The role of IT in Strategic Business Planning		
Answer Options	Score	Response Percent
No seat at the business table	1	23%
Business process enabler	2	44%
Business process improvement driver	3	14%
Business strategy enabler/driver	4	10%
IT enables Business to quickly adapt and change	5	10%

The sharing of and attitudes about Risks and Rewards between IT and the Business		
Answer Options	Score	Response Percent
IT takes all risks with little reward	1	6%
IT takes most of risks with little reward	2	12%
IT and Business start sharing risks and rewards	3	52%
Risks and rewards shared	4	27%
Managers are encouraged to take risks	5	4%

Management of the Business/IT Relationship		
Answer Options	Score	Response Percent
Relationship isn't managed	1	8%
Managed on an ad-hoc basis	2	44%
Processes exist but not always followed	3	21%
Processes exist and are complied with	4	21%
Processes are continuously improved	5	6%

The relationship between IT and the Business		
Answer Options	Score	Response Percent
Conflict and mis-trust	1	2%
Primarily transactional relationship	2	46%
IT becoming a valued service provider	3	27%
Long-term partnership	4	19%
Partner, and trusted vendor of IT services	5	6%

The presence and participation of Business Sponsors/Champions for IT projects		
Answer Options	Score	Response Percent
Usually none	1	39%
Often have a senior IT sponsor	2	23%
IT and Business sponsor at departmental level	3	33%
Business sponsor at corporate level	4	4%
Managing Director is the business sponsor	5	2%

5). Technology

How far have the primary IT systems evolved		
Answer Options	Score	Response Percent
Traditional Office Support systems (e.g. accounting, e-mail)	1	25%
Transaction based systems (e.g. Shop Floor Tracking)	2	4%
Business process enabler (e.g. an MRP system like SAP or JDE)	3	71%
Business process driver	4	0%
Business strategy driver/enabler	5	0%

How well defined are the IT Standards for computer hardware, software, and systems		
Answer Options	Score	Response Percent
None or ad-hoc	1	8%
Standards defined	2	17%
Emerging Company or Group standards	3	37%
Company or Group standards	4	37%
Extended to external partners (e.g suppliers, customers)	5	2%

The level of integration of IT systems within each Functional Department		
Answer Options	Score	Response Percent
No formal integration of systems	1	17%
Early attempts at integration	2	21%
Integrated within specific functional departments	3	58%
Integrated with external partners (e.g suppliers, customers)	4	4%
Evolving with external partners (e.g suppliers, customers)	5	0%

The level of integration of IT systems between Functional Departments		
Answer Options	Score	Response Percent
No formal integration of systems	1	15%
Early attempts at integration	2	33%
Integrated between specific functional departments	3	48%
Integrated with external partners (e.g suppliers, customers)	4	4%
Evolving with external partners (e.g suppliers, customers)	5	0%

The level of integration of IT systems with External Partners		
Answer Options	Score	Response Percent
No formal integration	1	56%
Early concept testing	2	12%
Emerging with key partners	3	25%
Integrated with key partners	4	8%
Evolved with all partners	5	0%

How the flexibility of IT Systems are perceived		
Answer Options	Score	Response Percent
Utility run at minimum cost	1	25%
Becoming driven by business strategy	2	42%
Driven by business strategy	3	19%
Beginning to help business respond to change	4	10%
Enable fast response to changing conditions	5	4%

6). Human Resource Skills

The attitudes to creating and working within an innovative and entrepreneurial environment		
Answer Options	Score	Response Percent
Discouraged	1	2%
Somewhat encouraged at functional departmental level	2	46%
Strongly encouraged at functional departmental level	3	35%
Also strongly encouraged at Corporate level	4	17%
Also strongly encouraged with partners	5	0%

Who makes the Key IT Decisions		
Answer Options	Score	Response Percent
Top business and IT management at Corporate Level	1	52%
Top business and IT management with emerging functional influence	2	19%
Top business and functional management, IT advises	3	17%
Top business and IT management across the company	4	8%
Top management across company and partners	5	4%

What is the Organisation's predominant management style		
Answer Options	Score	Response Percent
Command and control	1	21%
Consensus-based	2	8%
Results based	3	54%
Profit/value based	4	17%
Relationship based	5	0%

What is the Organisation's attitude to Change		
Answer Options	Score	Response Percent
Resistant to change	1	4%
Change readiness programs emerging	2	37%
Programs in place at functional departmental level	3	21%
Programs in place at the corporate level	4	23%
Proactive and anticipate change	5	15%

Are there career crossover opportunities between functions		
Answer Options	Score	Response Percent
Job transfers rarely occur	1	23%
Occasionally occur within departmental functions	2	50%
Regularly occur for departmental functional management	3	14%
Regularly occur at all levels within departmental functions	4	14%
Also occur at corporate level	5	0%

What are the opportunities for cross-functional training and job rotation		
Answer Options	Score	Response Percent
No opportunities	1	35%
Emerging led by departmental functions	2	60%
Formal programs run by all departmental functions	3	4%
Across the organisation	4	2%
Extended to partners	5	0%

The level and quality of Social Interaction between IT and the business		
Answer Options	Score	Response Percent
Minimal IT/Business interaction	1	29%
Strictly a business only relationship	2	33%
Trust and confidence is starting	3	21%
Trust and confidence is achieved	4	17%
Trust and confidence is extended to external partners (e.g suppliers, customers)	5	0%

Appendix C

Senior Managers											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Average	Total		Total
Communications	2.88	2.50	2.25	3.13	2.38	1.63			2.46		2.27
Value Measurement	2.25	3.50	1.75	2.38	1.50	1.75	1.88		2.14		
Governance	2.00	1.88	2.50	2.88	1.75	2.13			2.19		
Partnership	2.25	1.88	3.25	2.38	2.13	2.50			2.40		
Technology	1.88	3.38	2.13	1.63	1.25	2.25			2.08		
HR Skills	2.63	1.50	2.88	3.25	2.50	1.88	1.88		2.36		

Table 01

Middle Managers											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Average	Total		Total
Communications	3.22	2.72	1.83	3.83	2.00	1.56		2.53			2.37
Value Measurement	2.05	2.00	1.89	2.22	1.78	2.17	1.89	2.00			
Governance	2.50	1.83	2.56	2.39	1.67	2.28		2.21			
Partnership	2.83	2.56	3.28	3.17	2.89	2.00		2.79			
Technology	2.56	2.89	2.50	2.39	1.78	2.28		2.40			
HR Skills	2.94	1.89	2.56	3.17	1.94	1.67	2.44	2.37			

Table 02

Team Leaders											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Average	Total		Total
Communications	2.96	3.04	1.88	3.32	2.32	1.96		2.58			2.48
Value Measurement	2.48	2.72	2.08	2.84	2.12	2.04	2.36	2.38			
Governance	2.28	2.44	2.60	2.72	2.00	2.32		2.39			
Partnership	2.28	2.44	2.96	2.56	3.00	2.04		2.55			
Technology	2.64	3.20	2.64	2.72	2.12	2.28		2.60			
HR Skills	2.56	2.12	2.76	3.08	2.28	1.76	2.32	2.41			

Table 03

Non IT											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Average	Total		Total
Communications	3.23	3.07	2.04	3.81	2.45	2.03		2.77			2.58
Value Measurement	2.54	2.63	2.01	2.55	1.99	2.42	2.19	2.33			
Governance	2.51	2.20	2.72	2.60	1.80	2.40		2.37			
Partnership	3.01	2.73	3.34	3.09	2.94	2.20		2.88			
Technology	2.59	2.93	2.68	2.68	2.13	2.57		2.59			
HR Skills	2.85	2.37	2.68	3.52	2.05	1.85	2.51	2.55			

Table 04

IT											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7		Average		Total
Communications	2.16	2.00	1.33	2.33	1.67	1.17			1.78		1.98
Value Measurement	2.83	2.67	1.50	3.83	1.17	1.67	2.00		2.24		
Governance	1.50	2.00	2.67	2.67	1.67	1.67			2.03		
Partnership	1.50	1.17	2.50	2.00	2.00	1.33			1.75		
Technology	2.33	3.50	2.17	2.33	1.33	1.67			2.22		
HR Skills	2.00	1.33	3.00	1.83	1.83	1.17	1.67		1.83		

Table 05

Appendix D

1). 'The style of interaction between Business and IT staff'

The IT staff are generally very helpful and eager to help with the business's IT issues although the red tape and offsite/matrix structure, seems more often to obstruct rather than to facilitate this
Approachable and normally helpful
The I.T Staff at Location X are always pleasant and helpful and make an effort to be available. However I feel that they need to integrate with the manufacturing function to appreciate and understand the issues at hand and how IT can make things easier i.e why can't we have one central system that tracks all products through the process.
Professionalism/friendliness & overall working relationship with on site staff On site staff know our software & hardware On site staff are always available & happy to help
I believe it is more transactional based, and IT are predominantly engaged when the project has been finalised or when the process breaks
Because the style of interaction is fairly informal and IT are generally very responsive and proactive in addressing the operational requests. The informal approach to getting things done and solving a problem works better for me than the more formal Corporate help desk electronic request system
Once a helpdesk call is being dealt with via staff on site, the level of service is always good. However, going through the corporate helpdesk function creates barriers. Online service is better. Never use the phone now.
The IT staff were previously employed directly by the business and therefore a good relationship still exists. I suspect that this relationship would not be as good if Business partner had replaced all staff as they would possibly work only to SLA and targets with no flexibility. I suspect that over time this relationship could break down if the group are driven by targets to the detriment of the customer
When working on a specific problem with IT staff, they are always professional and helpful. Also have worked with the same people over a number of years
Local IT staff have good working relationships with the rest of the business. They respond well to requests for help, even if that is help in getting a call correctly logged before they can begin to deal with the actual problem. The weakpoint is the corporate phone support and sometimes using the website, often solved by going directly to the local staff. I cannot stress strongly enough how reluctant we all are at having to use the phone support, it is very time consuming.
Friendly and approachable staff. Trust is the main factor that has been built up with years of building this business / customer relationship.
This comes from a hereditary relationship between the business and the local IT Team providing the business with a 'go to' option to raise issues.
The on-site IT staff have always been responsive and helpful towards the needs of the business staff in Location X. Delays occur when business staff have to phone the central help desk to raise an issue which is then referred back to the on-site staff.
Trust in IT personnel, ability to communicate face to face
IT always seems to be an after thought in any local business project, what doesn't help today is there is no IT representation at the SLT level where IT and the business are able to collaborate and plan the IT framework as an integral piece.
All the individuals that I've interacted with have been easy going and helpful.
Still working on "Old Company X contacts", and in same building to allow better working relationship. Staff know who to talk to and can access the group on site.
Local presence of IT staff with a long standing commitment to the business in Location X.
It works because of the personal nature of the Organisation. Unfortunately this gets eroded by the counterintuitive segmentation of the group.
I don't think I scored this very highly. For me the style has very much moved towards an "us and them approach".

2) 'The sharing of and attitudes about Risks and Rewards between IT and the Business'

As previously commented, the IT staff are generally very aware of the IT impact on the company and
--

routinely try to keep this running smoothly in spite of the higher structure rather than because of
As a site we need to embrace new technology and not just stagnate on what we currently have. Why are we always lagging with I.T. updates etc and technological advances? Whatever we do we need to be in control and not put the company at risk but we need to be smart about what we doing order to see some significant improvements.
As previously mentioned - Professionalism/friendliness & overall working relationship with on site staff On site staff know our software & hardware On site staff are always available & happy to help
All representatives take a risk based approach to change
I am not sure that it does adequately given the lack of interface and communication that is invisible between the two groups
Good relationship between IT and the business as the staff in IT were previously employed directly by the business.
I find that there can be a "cannot help" attitude from several, but not all, members of IT. As a customer of IT I find this influences my attitude to IT. One of my departments works closely with IT and I have provided resource to assist at times, this is not reciprocated.
Open & honest communication between local IT and business staff. If there are problems, this is acknowledged and can be dealt with.
Again we are still working the OLD team and contacts who are still on site.
Local presence of IT staff with history of loyalty to the site.
IT group understand the business and the effects they can have

3) 'What is the Organisation's attitude to Change?'

The Location X site is well used to change and growth, and is generally happy to embrace to new ideas from Corporate X
I feel that the organisation is open to change however the issue remains that the rate of change is slow at best. If we truly want to become a lean manufacturing facility we need to remove a number of wasteful processes which add no value and hinder the change process.
People want change to make the working life easier. The benefits of change should be sold better to staff
Collectively we are very open to change as we have historically been the smallest fish in the pond.
Because Corporate X employ the appropriate calibre of staff to work for a blue chip business who must understand the need for change and continuous improvement in order to survive. Training and educating staff on the need to change and challenge the status quo is important
Relatively young workforce who respect MD and will follow his lead.
We have had to deal with some much change in the last few years that it has become standard in many areas
Change has always been a constant at Location X! The increasing throughput over the last 15 years has forced us to change all aspects of how we work. This change is mostly gradual and constant but sometimes comes all in a one lump. Everyone is used to dealing with it and we can view it positively as "flexibility" or negatively as "churn". We're always looking for changes we can make to processes that will give us better short term stability.
Not: for IT related systems or processes the business can be slow to adopt as a change can be seen as too risky
Change is essential to the future of the Location X site as it is the only way we will remain competitive in the market place.
Mixed view on this depending on the area of the business and the level of wider experience in each group. However Location X is used to a degree of change from the evolution of the product lines so some understanding of change is inherent in the business.
Change has been the life blood of the Location X site since it opened. This has culminated in the Manufacturing transfer Project which is in itself all about change management.
The change that is lead from the top works well. However there are many aspects of change that have been poor generally because the future state has not been clearly defined

Appendix E

1. Consider the Alignment and Shared Understanding between the Business and IT...

This survey is a standard tool used in over 200 top organisations to benchmark the level of alignment between the Business and IT.

It looks at six key subjects :- Communications, Key Performance Indicators, Governance, Partnership, Technology, and HR Skills.

It is confidential and secure, your individual views will not be made known to management

It has a simple multi-choice format, and should take no more than 5 to 10 minutes to complete.

Thank you in anticipation

*** Do you freely consent to participate in this survey?**

☐ Yes

☐ No

*** Your Name :- First Name followed by Surname**

Division

Role

Pre-Integration Employee of :-

☐ Old Company X

☐ New Employee

2. 1st Alignment Subject - Communications between the Business and IT

You should consider the effectiveness of the exchange of ideas, knowledge, and information between IT and the Business at Location X. Do both parties clearly understand the company's strategies, plans, Business and IT environments, risks, priorities, and how to achieve shared goals.

* Does IT understand the Business and it's needs?

- ☐ IT Management are not aware of business needs
- ☐ There is a limited IT awareness
- ☐ IT senior and middle management are aware
- ☐ Awareness is pushed down through the IT organisation
- ☐ Awareness is embedded in all levels of the IT organisation

* Does the Business understand IT and it's needs?

- ☐ Business Management are not aware of IT needs
- ☐ There is limited Business awareness
- ☐ There is emerging Business awareness
- ☐ The Business is aware of the potential of IT
- ☐ The awareness is embedded in all levels of the Business

* Understanding and learning about the Business and it's processes by IT staff

- ☐ Casual conversations and meetings
- ☐ Newsletters, reports, e-mail
- ☐ Training, departmental meetings
- ☐ Formal methods, sponsored by senior management
- ☐ Monitored for effectiveness

* The style of interaction between Business and IT staff

- ☐ Business to IT only, formal interaction
- ☐ One-way, somewhat informal
- ☐ Two-way, formal
- ☐ Two-way, informal
- ☐ Two-way, informal and flexible

*** The extent of Information and Knowledge Sharing**

- ☐ Ad-hoc
- ☐ Some structured sharing emerging
- ☐ Structured around key processes
- ☐ Formal sharing at all levels
- ☐ Formal sharing extended to external partners (e.g suppliers, customers)

*** The liaison or working relationship between the Business and IT staff**

- ☐ None or only used as needed
- ☐ Primarily an IT to Business link
- ☐ Facilitated knowledge transfer
- ☐ Facilitated relationship building
- ☐ Building relationship with external partners (e.g suppliers, customers)

3. 2nd Alignment Subject - Value Measurement

You should consider the use of balanced measurements (key performance indicators) at Location X to demonstrate the contributions of the IT organisation to the business in terms that both the Business and IT understand and accept

*** The way IT Metrics are presented to the Business.**

- ☐ Technical; not related to business
- ☐ Measured in terms of cost efficiency
- ☐ Measured in traditional financial terms
- ☐ Measured in terms of effectiveness
- ☐ Extended to external partners (e.g suppliers, customers)

*** How Business Metrics are presented**

- ☐ Ad-hoc
- ☐ At the departmental level
- ☐ Traditional financial
- ☐ Also measure customer value
- ☐ Balanced scorecard, extended to external partners (e.g suppliers, customers)

*** The linkage between Business and IT Metrics**

- ☐ Value of IT investments are rarely measured
- ☐ Business and IT metrics unlinked
- ☐ Business and IT metrics becoming linked
- ☐ Business and IT metrics formally linked, reviewed and acted upon
- ☐ Balanced scorecard, including external partners (e.g suppliers, customers)

*** Are Service Level Agreements in place for IT services provided to the Business**

- ☐ Sporadically present
- ☐ Expressed technically at the departmental level
- ☐ Emerging across the Group X Business
- ☐ Throughout Group X Business
- ☐ Extended to external partners (e.g suppliers, customers)

*** Are Benchmarking exercises undertaken for IT services provided to the Business**

- ☐ Seldom or never
- ☐ Sometimes informally
- ☐ May benchmark formally, seldom act
- ☐ Routinely benchmark, usually act
- ☐ Routinely benchmark, act and measure results

*** Are there formal assessments following the implementation of an IT Investment or project**

- ☐ None
- ☐ Some; typically for problems
- ☐ Becoming a routine practice
- ☐ Routinely assess and act on findings
- ☐ Routinely assess, act and measure results

*** Are there Continuous Improvement processes in place to improve Business/IT alignment**

- ☐ None
- ☐ Few, effectiveness not measured
- ☐ Few, starting to measure effectiveness
- ☐ Many, frequently measure effectiveness
- ☐ Practices and measures well established

4. 3rd Alignment Subject - Governance

You should consider who has the authority to make IT decisions and what processes are used at strategic (SMT), tactical (Middle Manager), and operational (Team Leader) levels at Location X to set IT priorities to allocate IT resources

*** The level of input from IT during Business Strategy Planning**

- ☐ No IT input, or done as needed
- ☐ At the departmental level, slight IT input
- ☐ Some IT input and cross-functional planning
- ☐ At departmental and Group X functional level, with IT
- ☐ With IT and external partners (e.g suppliers, customers)

*** The level of input from the Business during IT Strategy Planning**

- ☐ None, or done as needed
- ☐ At IT departmental level, slight business input
- ☐ Some Business input and cross-functional planning
- ☐ At IT Department and Group X functional IT level, with Business
- ☐ With Business and external partners (e.g suppliers, customers)

*** How IT is Budgeted**

- ☐ As a cost of doing business, spending is unpredictable
- ☐ As a cost of doing business by functional organisations
- ☐ Some IT projects are treated as investments
- ☐ IT is treated as an investment
- ☐ As a Profit Center (Internal Business)

*** What is the rationale for IT Spending**

- ☐ Reduce Costs
- ☐ Productivity, efficiency
- ☐ As a process enabler
- ☐ As a process driver, and a strategic business enabler
- ☐ For competitive advantage, and profit

*** The number and frequency of meetings of Business/IT Steering Committee(s)**

- ☐ Don't have them
- ☐ Meet informally as needed
- ☐ Formal committees meet regularly
- ☐ Proven to be effective
- ☐ Also include external partners (e.g suppliers, customers)

*** How Projects are Prioritised by the Business and IT**

- ☐ Reactive to Business or IT needs
- ☐ Determined by IT function
- ☐ Determined by Business function
- ☐ Mutually determined
- ☐ External partners priorities are considered

5. 4th Alignment Subject - Partnership

You should gauge the relationship between the Business and the IT organisation at Location X, including the degree of trust between both parties, how each perceives the other's contribution, and IT's role in defining the Business's strategies.

* The Business perception of the value of IT

- ☐ IT is a cost of doing business
- ☐ IT is emerging as an asset
- ☐ IT enables future business activity
- ☐ IT drives future business activity
- ☐ IT partners with the business in creating value

* The role of IT in Strategic Business Planning

- ☐ No seat at the business table
- ☐ Business process enabler
- ☐ Business process improvement driver
- ☐ Business strategy enabler/driver
- ☐ IT enables Business to quickly adapt and change

* The sharing of and attitudes about Risks and Rewards between IT and the Business

- ☐ IT takes all risks with little reward
- ☐ IT takes most of risks with little reward
- ☐ IT and Business start sharing risks and rewards
- ☐ Risks and rewards shared
- ☐ Managers are encouraged to take risks

* Management of the Business/IT Relationship

- ☐ Relationship isn't managed
- ☐ Managed on an ad-hoc basis
- ☐ Processes exist but not always followed
- ☐ Processes exist and are complied with
- ☐ Processes are continuously improved

*** The relationship between IT and the Business**

- ☐ Conflict and mis-trust
- ☐ Primarily transactional relationship
- ☐ IT becoming a valued service provider
- ☐ Long-term partnership
- ☐ Partner, and trusted vendor of IT services

*** The presence and participation of Business Sponsors/Champions for IT projects**

- ☐ Usually none
- ☐ Often have a senior IT sponsor
- ☐ IT and Business sponsor at departmental level
- ☐ Business sponsor at corporate level
- ☐ Managing Director is the business sponsor

6. 5th Alignment Subject - Technology

You should consider IT's provision of flexible computing systems at Location X. It's evaluation and application of emerging technologies, and its ability to enable or drive business process changes, and its delivery of valuable IT solutions

* How far have the primary IT systems evolved

- ☐ Traditional Office Support systems (e.g. accounting, e-mail)
- ☐ Transaction based systems (e.g. Shop Floor Tracking)
- ☐ Business process enabler (e.g. an MRP system like SAP or JDE)
- ☐ Business process driver
- ☐ Business strategy driver/enabler

* How well defined are the IT Standards for computer hardware, software, and systems

- ☐ None or ad-hoc
- ☐ Standards defined
- ☐ Emerging Group X or Corporate standards
- ☐ Group X or Corporate standards
- ☐ Extended to external partners (e.g suppliers, customers)

* The level of intergration of IT systems within each Functional Department (e.g Within an Engineering Department)

- ☐ No formal integration of systems
- ☐ Early attempts at integration
- ☐ Integrated within specific functional departments
- ☐ Integrated with external partners (e.g suppliers, customers)
- ☐ Evolving with external partners (e.g suppliers, customers)

* The level of intergration of IT systems between Functional Departments (e.g Between an Engineering Department and a Manufacturing Department)

- ☐ No formal integration of systems
- ☐ Early attempts at integration
- ☐ Integrated between specific functional departments
- ☐ Integrated with external partners (e.g suppliers, customers)
- ☐ Evolving with external partners (e.g suppliers, customers)

*** The level of intergration of IT systems with External Partners (e.g Suppliers, Customers)**

- ☐ No formal integration
- ☐ Early concept testing
- ☐ Emerging with key partners
- ☐ Integrated with key partners
- ☐ Evolved with all partners

*** How the flexibility of IT Systems are perceived**

- ☐ Utility run at minimum cost
- ☐ Becoming driven by business strategy
- ☐ Driven by business strategy
- ☐ Beginning to help business respond to change
- ☐ Enable fast reponse to changing conditions

7. 6th Alignment Subject - Human Resource Skills

You should consider HR practices that encourage innovation, career opportunities and the development of an individual's skills at Location X. Also the organisation's readiness for change, capability for learning, and ability to leverage new ideas.

* The attitudes to creating and working within an innovative and entrepreneurial environment

- ☐ Discouraged
- ☐ Somewhat encouraged at functional departmental level
- ☐ Strongly encouraged at functional departmental level
- ☐ Also strongly encouraged at Corporate level
- ☐ Also strongly encouraged with partners

* Who makes the Key IT Decisions

- ☐ Top business and IT management at Corporate Level
- ☐ Top business and IT management with emerging functional influence
- ☐ Top business and functional management, IT advises
- ☐ Top business and IT management across the company
- ☐ Top management across company and partners

* What is the Organisation's predominant management style

- ☐ Command and control
- ☐ Consensus-based
- ☐ Results based
- ☐ Profit/value based
- ☐ Relationship based

* What is the Organisation's attitude to Change

- ☐ Resistant to change
- ☐ Change readiness programs emerging
- ☐ Programs in place at functional departmental level
- ☐ Programs in place at the corporate level
- ☐ Proactive and anticipate change

*** Are there career crossover opportunities between functions**

- ☐ Job transfers rarely occur
- ☐ Occasionally occur within departmental functions
- ☐ Regularly occur for departmental functional management
- ☐ Regularly occur at all levels within departmental functions
- ☐ Also occur at corporate level

*** What are the opportunities for cross-functional training and job rotation**

- ☐ No opportunities
- ☐ Emerging led by departmental functions
- ☐ Formal programs run by all departmental functions
- ☐ Across the organisation
- ☐ Extended to partners

*** The level and quality of Social Interaction between IT and the business**

- ☐ Minimal IT/Business interaction
- ☐ Strictly a business only relationship
- ☐ Trust and confidence is starting
- ☐ Trust and confidence is achieved
- ☐ Trust and confidence is extended to external partners (e.g suppliers, customers)

8. Leaving the Survey

You have opted to terminate the survey

Please provide an answer on your reason to terminate the survey

9. End of Survey

Thank you for your participation

Appendix F

1. Consider potential improvement ideas for the Alignment between the Business...

A Big Thank you for taking part in the previous Business/IT Alignment survey!

The result was a Business/IT Alignment Maturity score at Location X of Level 2. The average for our Business sector is Level 3, so with your help we would like to identify some opportunities for improvement.

We are asking for your views and feedback on 5 items that scored weakly at Level 1, and 3 items that scored strongly at Level 3.

This will enable us to focus on what we should be doing better, and understand what works well for you now, and establish the impact of the Post Merger Integration

As before:-

The survey is confidential and secure, your individual views will not be made known to management

It has an overall multi-choice format, and should take no more than 5 - 10 minutes to complete.

Thank you in anticipation

*** Do you freely consent to participate in this survey?**

☐ Yes

☐ No

*** Your Name :- First Name followed by Surname**

2. Measurement of Success of IS Integration

The process of Integrating Information Systems during an Acquisition is critical to its success, as we depend on timely and accurate information to run the Business.

Please assess your satisfaction with the success of the merger both in Business and IT terms since our acquisition in 2006

- * 1. Please express your overall satisfaction with the IT Integration Processes, e.g The rollout of PCs in 2007, the connection to the Corporate Network, and the implementation of new corporate software systems or solutions.**

- ☐ Successful
- ☐ Somewhat Successful
- ☐ Mixed Results
- ☐ Somewhat Unsuccessful

- * 2. Please express your overall satisfaction with the Integrated Information Systems, e.g Corporate software solutions; JDEdwards, SAP; e-mail, intranet, etc**

- ☐ Successful
- ☐ Somewhat Successful
- ☐ Mixed Results
- ☐ Somewhat Unsuccessful

- * 3. Please express your overall satisfaction with the ability of IT Function to exploit our merger opportunities, e.g growth, higher profitability, through Supply Chain rationalisation, manufacturing rationalisation, etc**

- ☐ Excellent
- ☐ Good
- ☐ Average
- ☐ Poor

- * 4. Please express your overall satisfaction with the ability of the IT Function to avoid merger problems, e.g ability to see problems early in the supply chain, manufacturing, quality issues, customer issues, etc**

- ☐ Excellent
- ☐ Good
- ☐ Average
- ☐ Poor

3. 1st Alignment Subject - Communications between the Business and IT

You should consider the effectiveness of the exchange of ideas, knowledge, and information between IT and the Business at Location X. Do both parties clearly understand the company's strategies, plans, Business and IT environments, risks, priorities, and how to achieve shared goals.

* 5. 'The liaison or working relationship between the Business and IT staff'

This scored weakly, with an average of 1.76 (Level 1) out of 5.

Please select the top two ideas that you believe would improve things.

- ☐ Business/IT committees to oversee IT applications, projects and operational issues at SMT, Middle Manager, and Team Leader level
- ☐ Quarterly Feedback Sessions from a corporate IT Business Relationship Manager on IT strategy, core applications and issues
- ☐ IT Representative to attend Monthly Divisional Meetings
- ☐ Quarterly Feedback Sessions from our IT Business Partner on their IT processes. Logging, prioritisation, escalations and support of IT issues
- ☐ Annual User Satisfaction Survey
- ☐ Annual End User workplace 'healthchecks' to identify IT opportunities and needs
- ☐ Create an IT Balanced Scorecard with Business Representatives which reflects and measures the Business and User Needs
- ☐ None of These

If you have your own improvement idea or comment, please type it into box below.

6. 'The style of interaction between Business and IT staff'

(Optional Question)

This scored well, with an average of 3.47 (Level 3) out of 5.

Please give a reason(s) why you believe 'The style of interaction between Business and IT staff' works well at Location X

If not, please comment

4. 2nd Alignment Subject - Value Measurement

You should consider the use of balanced measurements (key performance indicators) at Location X to demonstrate the contributions of the IT organisation to the business in terms that both the Business and IT understand and accept

*** 7. 'Are Benchmarking exercises undertaken for IT services provided to the Business'**

This scored weakly, with an average of 1.90 (Level 1) out of 5.

Please select the top two ideas that you believe would improve things.

- ☐ Publish Monthly Report on IT Helpdesk Performance and IT Systems availability on Intranet
- ☐ Publish Incident Reports for IT system failures, and corrective actions on Intranet
- ☐ Publish Location X IT KPIs (Key Performance Indicators) in League table with other Group X or IT Business Partner supported Manufacturing Sites
- ☐ 3rd Party Review and Benchmarking Report of current IT performance
- ☐ Post implementation IT project reviews
- ☐ Business review of Contractual IT Business Partner IT KPIs
- ☐ None of These

If you have your own improvement idea or comment, please type it into box below.

5. 3rd Alignment Subject - Governance

You should consider who has the authority to make IT decisions and what processes are used at strategic (SMT), tactical (Middle Manager), and operational (Team Leader) levels at Location X to set IT priorities to allocate IT resources

* 8. 'The number and frequency of meetings of Business/IT Steering Committee(s)'

This scored weakly, with an average of 1.82 (Level 1) out of 5.

Please select the top two ideas that you believe would improve things

- ☐ Business/IT committees to oversee IT applications, projects and operational issues at SMT, Middle Manager, and Team Leader level
- ☐ A seat on Business Projects for an IT representative, either local or Group X IT Business Relationship Manager
- ☐ Programme Management (To Manage and Publish Information on all cross-functional Location X projects)
- ☐ Quarterly Feedback Briefings from a corporate Group X IT Business Relationship Manager on IT strategy, core applications and issues
- ☐ Undertake joint Business Process Re-engineering projects to identify opportunities to utilise IT technology
- ☐ Monthly e-mail summary to all employees with Intranet links to updates and information on key Location X projects
- ☐ None of These

If you have your own improvement idea or comment, please type it into box below.

6. 4th Alignment Subject - Partnership

You should gauge the relationship between the Business and the IT organisation at Location X, including the degree of trust between both parties, how each perceives the other's contribution, and IT's role in defining the Business's strategies.

9. 'The sharing of and attitudes about Risks and Rewards between IT and the Business'

(Optional Question)

This scored well, with an average of 3.47 (Level 3) out of 5.

Please give a reason(s) why you believe 'The sharing of and attitudes about Risks and Rewards between IT and the Business' works well at Location X

If not, please comment

7. 5th Alignment Subject - Technology

You should consider IT's provision of flexible computing systems at Location X. It's evaluation and application of emerging technologies, and its ability to enable or drive business process changes, and its delivery of valuable IT solutions

* 10. 'The level of Integration of IT systems with External Partners (e.g Suppliers, Customers)'

This scored weakly, with an average of 1.85 (Level 1) out of 5.

Please select the top two ideas that you believe would improve things

- ☐ Undertake joint Business Process Re-engineering projects to identify opportunities to utilise IT technology
- ☐ Process Map our business processes to include interfaces to customers and suppliers and look to implement appropriate software solutions
- ☐ Leverage support from Corporate Business Partner Management who create 3rd party connectivity for various outsourcing solutions
- ☐ Quarterly Briefings from a corporate Group X IT Business Relationship Manager on IT Strategy, Core Applications and Issues
- ☐ Implement Standard Corporate IT Enterprise Applications (e.g SAP to replace JDEdwards)
- ☐ Introduce Paperless Office and Workflow Applications
- ☐ None of These

If you have your own improvement idea or comment, please type it into box below.

8. 6th Alignment Subject - Human Resource Skills

You should consider HR practices that encourage innovation, career opportunities and the development of an individual's skills at Location X. Also the organisation's readiness for change, capability for learning, and ability to leverage new ideas.

* 11. 'What are the opportunities for cross-functional training and job rotation'

This scored weakly, with an average of 1.75 (Level 1) out of 5.

Please select the top two ideas that you believe would improve things

- ☐ Cross-Train IT staff in Key Business Processes with key 'power' users
- ☐ Rotate IT Staff into Business Roles
- ☐ Staff Development Targets to Include Opportunities for Job Rotation within Departments at Location X
- ☐ Staff Development Targets to Include Opportunities for Job Rotation within Group X or Corporate
- ☐ Key Staff to cross train and become familiar with the processes of their internal customers and suppliers
- ☐ Undertake inter-departmental Business Process Re-engineering projects to identify opportunities to industrialise our processes
- ☐ None of These

If you have your own improvement idea or comment, please type it into box below

12. 'What is the Organisation's attitude to Change'

(Optional Question)

This scored well, with an average of 3.14 (Level 3) out of 5.

Please give a reason(s) why you believe 'The Organisation's attitude to Change' works well at Location X

If not, please comment

9. Leaving the Survey

You have opted to terminate the survey

Please provide an answer on your reason to terminate the survey

10. End of Survey

Thank you